

E A S T · W E S T MANAGEMENT I N S T I T U T E

# THE ESTABLISHMENT OF THE PENSION FUNDS SYSTEM IN THE BALTIC STATES

bу

Valdemaras Katkus and Romas Lazutka

Vilnius, December 2002

This publication and the research that enabled it were co-financed by a grant from the Partners for Financial Stability (PFS) Program, a cooperative program of East-West Management Institute, Inc. and USAID. The opinions expressed herein are those of the authors and do not necessarily reflect the views of the PFS Program or the Lithuanian Banking, Insurance and Finance Institute.

#### Contents

Abstract

- 1. Introduction
- 2. Preconditions for the pension funds system establishment
- 3. Growth in the Baltic States 1990-2001
- 4. Why the initial collapse?
- 5. Macroeconomic stability
- 5.1. Inflation
- 5.2. Current accounts and financial flows into the Baltic States
- 5.3. Foreign direct investment and privatisation
- 6. De-industrialisation in the Baltic countries
- 7. Capital accumulation and firms financing choice
- 8. Growth and financial intermediation
- 9. Banking sectors in Estonia, Latvia and Lithuania
- 9.1. Estonian banking structure
- 9.2. Latvian banking structure
- 9.3. Lithuanian banking structure
- 9.4. Banking crises and restructuring costs
- 9.5. Trends in the Baltic's banking industries developments
- 10. Non-banking financial intermediaries
- 11. Insurance markets in the Baltic's
- 11.1. The structure of the Baltic's insurance market
- 11.2. Investment portfolios of life insurance companies
- 11. Baltic's capital markets
  - 11.2. Fixed income securities market
  - 11.3. Stock markets
  - 11.4. Globalization and the Baltic's capital markets
- 12. Financial supervision in the Baltic States and systemic risk
- 13. Financial development of the Baltic States
- 14. The characteristics of the Baltic States' economies
- 15. Legal background for Pension Reform
- 16. Conditions for Demographic Pension System Development
- 17. Changes in the Number of Pensioners
- 18. Pension Resources
- 19. Pension Amount
- 20. Pillar II Compulsory Accumulative Insurance Pensions
- 21. Pension Pillar III
- 22. National regulations on pension funds portfolios
  - 22.2. Requirements for Pension Fund Managers
  - 22.3. What Role do Assets Structures Play?
  - 22.4. Quantitative Investments Regulations
- 23. EU Commission new proposals for reforms in pension funds system
  - 23.2. Single European Financial Market Establishment
  - 23.3. EU new proposals for the pension funds regulations

- 24. Pension reform influence upon financial and industrial sectors
  - 24.2. The savings-investment gaps in Baltic countries
  - 24.3. The current accounts deficit and the need for new domestic financial resources
  - 24.4. Pension reform influence on the financial and industry sectors

Conclusions

References

#### **Abstract**

The pace of pension system privatisation in Estonia, Latvia and Lithuania is different. Baltic States policymakers are also heavy conditioned by what happened in the past (positive or negative feedback). In Estonia and Latvia there established three pillar pension а system. introduced a two pillar pension system without mandatory pension saving. The pension funds systems in the Baltic States are in the early stage of development. Their shape depends on the current financial system structure in each country. However, the Baltic financial sectors are still below the level of development of the financial sectors in EU countries. The difference is remarkable both in the level of financing and in the variety of instruments available in the markets. The financing in the Baltic's is dominated by banking sector, which is highly concentrated and owed by internationals financial conglomerates. The Baltic securities sector has been stagnant even during the recent period of growth. Banks of the countries are the main power behind the pension funds system development. The Baltic countries are EU accession countries and will become EU members on May 1, 2004. In the future their economic, financial and pension funds system development will be shaped by EU legislation and EU integration process.

**Key words:** pension funds, pension system reform, financial systems, Estonia, Latvia, Lithuania, the European Union.

Authors: Valdemaras Katkus: <a href="valdemaras.katkus@lrs.lt">valdemaras.katkus@lrs.lt</a>
Romas Lazutka: <a href="romas.lazutka@fsf.vu.lt">romas.lazutka@fsf.vu.lt</a>

#### 1. Introduction

Establishment of pension funds system directly depends on a chosen scale of the overall pension reform and its implementation pace. The two mentioned parameters of scale and the magnitude of change are closely inter-related with the state of financial sector, demographic situation in a country and economic growth rate. The early experience of the Baltic States in the process of restructuring of economic relations from the socialist ones into market economy based relations, which are nowadays called a transition economy, takes an important place in a discussion on the establishment of pension funds system. One can easily draw a parallel between discussions of 1998-2002 in Estonia, Latvia and Lithuania concerning pension system privatization and the scale and pace of the privatization of the enterprises of 1990-1994,

especially having in mind that the first one has become an outcome of the latter.

The essence of the question to be answered has remained the same: How to build a system that will survive in a maximal variety of situations? In fact, there are hardly two countries to have instituted an identical pension funds system because of different conditions. The systems can only be really understood by analysing the process through which they have been assembled.

Today the Baltic pension funds system is in early beginning stage. The new pension funds industries have different shape conditioned by past economic processes.

Estonia, Latvia and Lithuania, are considered as transition economies. Meanwhile, these states have had an exceptional historic experience if compared with other Eastern and Central European states. Up to 1940 they were just at an initial stage of establishing the social welfare schemes. Later for 50 years the Soviet Union social security system has prevailed in these occupied states. After the declaration of independence in Lithuania in 1990, Latvia and Estonia in 1991, the Baltic States had to create their independent social welfare systems under very difficult conditions of public institutions establishment and economy's separation from the disrupted Soviet system.

Under situation described above the essential task in the pension field was to ensure its funding, therefore in 1990-1991 the Baltic states began establishing social insurance (or Social) funds separately from the state budget. The main concern of governments was to ensure at least a certain amortisation of the decline in living standards of pensioners in order to safeguard them against severe poverty.

In 1990-1995, the aggregate indicator of production slump in the Baltic States was approximately 30 per cent higher than the respective indicator of the Eastern and Central European states, and under extreme circumstances (Latvia) it declined by 51 per cent. The economic recession has lasted for 5-6 years.

After a long period of economic recession, since 1995-1996 the whole region of Baltic States has shown signs of growing. However, today their economies are still considerably contracted if compared with the beginning of the reforms in 1989-1990: in 2001 the real GDP in Estonia comprised 87 per cent (in 1989 = 100), and in Latvia and Lithuania - 69 per cent of GDP.

The decline in real GDP added to the rising pension burden. In view of the already low benefit level and the political need for social safety provisions for the elderly, real benefits could not be downward-adjusted by the same degree as it happened with real wages. These initial conditions contributed to the establishment of social insurance systems which are now in restructuring process. In Estonia and Latvia there were established a three pillar

pension system. Lithuania introduced a two pillar pension system without mandatory pension saving.

The success of pension funds functioning depends on a financial structure at the time of the establishment new system. The Baltic countries started to construct their financial sectors twelve years ago almost from scratch. The work was not easy and all three countries experienced banking crises in 1992-1995. At that time, the biggest shortcomings in the sector concerned the functioning of institutions, legislation and the lack of human capital. In the second half of the 1990's, the Baltics started to reorganize and reform their financial sectors to make them more efficient and reliable. Privatization was speeded up and new legislation and supervision institutions were put in place. As a result, the financial sectors in the Baltic countries have developed quite rapidly over recent years and there are currently no immediate threats to their stability. Despite positive developments in the last few years, the Baltic financial sectors are still clearly below the level of development of the financial sectors in EU countries. Also the banking sectors, which dominate the financial intermediation in the Baltic countries, are still relatively small.

After privatization and a number of mergers, the banking sectors in the Baltic countries have ended up being highly concentrated and largely foreign-owned. The concentration has not only happened inside the countries but also at the Baltic level. Foreign owners control nearly all sizeable banks in the Baltic's and most of these banks are operating in all three countries. In addition to that, foreign banks have brought concentration to the Baltic other financial intermediaries (leasing, insurance companies) through the establishment their subsidiaries in this financial markets. The bancassurance is dominant financial organizational structure in Estonia and Lithuania.

fall οf production and different forms  $\circ f$ privatization in Baltic countries created at the micro level different path for the development in Estonia, Latvia and Lithuania. The big concessions by governments in tax relief for the foreign investors and tax exemption on reinvested profit push companies more relies on internal financing. This created additional limitation on the development securities markets in the Baltic's. Today the Baltic security markets are small and dominated by bond trading. The development of that sector has been stagnant even during the recent period of growth. Such a situation put some limitation on the pension funds investment choices.

The Baltic countries are EU accession countries and will become EU members on May 1, 2004. In the future their economic, financial and pension funds system development will be shaped by EU legislation and EU integration process.

In this paper, we present a short analysis of the establishment processes of the Baltic pension funds markets and we concentrate very much on describing the situation in the financial sectors, as they are related to the economic growth. Our aim is to give a general overview of the current size, structure and channels of financing pension contractual savings in the Baltic countries. In particular we focus on the initial conditions which shaping functioning of the current pension funds system.

### 2. Preconditions for the pension funds system establishment

Many economists now agree that pension reform, economic restructuring, and the growth options for transition countries are closely related.

Time required for the evolution of a complex pension system form from simple elements crucially depends on the number and distribution of potential intermediate stable form. The shift towards funded pensions is closely related to the development of the financial sector and its infrastructure. The preconditions for launching of the pension system reform are also improved together with the increased number of stable financial institutions. When and how one may begin establishing a pension funds system in a transition economy?

The minimum requirements of the financial sector on the eve of the pension reform include low inflation, real interest rates, assets diversity, indexed government securities and indexed annuity. Holzmann (1994, 2002) formulated four minimum conditions for funded pension schemes:

- Low-middle income level (USD 2000 per capita and above) as proxy for broader demand of financial market services;
- Credible macroeconomic policies to provide enabling environment for the development of long-term financial instruments;
- Core functioning financial market institutions (Banks and custodian services) and long-term government commitment for the development of FM;
- Open capital account to diversify investment and risk.

The establishment of the pension funds is a part of the pension system reform in the Baltic countries.

# 3. Growth in the Baltic States 1990-2001

In 1990-1995 the aggregate indicator of production slump in the Baltic States was approximately 30 per cent higher than the respective indicator of the Eastern and Central European states, and under extreme circumstances (Latvia) it declined by 51 per cent. The economic recession has lasted for 5-6 years. Output fell in every Baltic country, with no exceptions, and it took longer than initially expected to recover. It is an unprecedented case in the history of economy of the XX century: the US production decline during the Great Recession in 1930-1934 amounted to 27 per cent and the recession lasted for 4 years (Table 1).

Table 1 shows that the American Great Depression was mild and relatively short compared to the transformation "failures." Surprisingly, the transformation "successes" suffered output declines as deep as those of the Great Depression and recovered more slowly than the U.S. in the 1930s.

For US took eight years to exceed pre-crises level, but for the Baltic States such a "recovery" process will take more time.

Table 1 Economic recession of the transit period

| Country<br>Total fall of production<br>of produ<br>comparison to 1990 | Continuous period of action (number of years) (per cent) | fall<br>in  |
|---|--|-------------|
| Estonia<br>35<br>Latvia<br>51<br>Lithuania<br>44                      |  | 5<br>6<br>5 |
| Central and Eastern Europe, as well as the Baltic States * 22,6       | 3,8  |             |
| CIS**<br>50,5   |  | 6,5         |
| Production recession of the   | Great crisis in 1930-1934                                |             |
| France  | 3  |             |
| 11<br>Germany   | 3  |             |
| 16<br>United Kingdom<br>6   | 2  |             |

USA 4 27

After a long period of economic collapse, since 1995-1996 the whole region of the Baltic States has shown signs of growth. However, today their economies are still considerably contracted if compared with the beginning of the reforms in 1989-1990: in 2001 the real GDP in Estonia comprised 87 per cent (in 1989 = 100), and in Latvia and Lithuania - 69 per cent of GDP (Table 2)!

Table 2
Growth of real GDP in the Baltic States

| Real GDP<br>Country<br>1998 1999 |                         | 1991 1992 1993<br>2001 | 1994 1995         | 1996 1997 |
|----------------------------------|-------------------------|------------------------|-------------------|-----------|
| (1989=100%)                      |                         |                        |                   |           |
| Estonia<br>10.4 5.               | -6.5<br>0 -0.7 6.9      | -13.0 -14.2<br>5.4     | -8.8 -2.0<br>87   | 4.6 4.0   |
| Latvia<br>8.6 3.9                |                         | -10.4 -34.9<br>7.6     | -14.9 0.6<br>69   | -0.8 3.3  |
|                                  | -5.0 -5.7<br>.9 3.9 5.7 |                        | .8 3.3<br>69      | 4.7 7.3   |
| Eastern Eur                      |                         |                        |                   | 1         |
|                                  | es* -6.6 -1<br>2.6 4.0  |                        | 0.3 3.9           | 5.4 4.8   |
| CIS**<br>1.0 -3.7                | -0.4<br>4.5 7.9         | -6.1 -17.3<br>5.9      | -12.7 -14.1<br>62 | -5.0 -3.4 |

<sup>\*</sup> Albania, Bulgaria, Czech Republic, Estonia, Croatia, Latvia, Lithuania, Poland, Romania, Slovakia, Slovenia, and Hungary.

These sober-minded numbers prove that even the success of transformation suffered considerable hardship and loss of relative economic position in the course of transformation. All this explains why the vast accomplishments of the transformation successes remain unappreciated in the Baltic countries themselves, where voters typically responded by voting the reformers out of office.

<sup>\*</sup> Albania, Bulgaria, Czech Republic, Estonia, Croatia, Latvia, Lithuania, Poland, Romania, Slovakia, Slovenia, and Hungary.

<sup>\*\*</sup> Armenia, Azerbaijan, Byelorussia, Georgia, Kazakhstan, Kyrgyz, Moldova, Russian Federation, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan.

Source: The World Bank. Transition: The First Ten Years. 2002, P 5.

<sup>\*\*</sup> Armenia, Azerbaijan, Byelorussia, Georgia, Kazakhstan, Kyrgyz, Moldova, Russian Federation, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan. Source: EBRD Transition report update 2002, P 17.

Due to the fact that a cumulative loss of output was bigger in Lithuania and Latvia, pension system reforms were implemented slower in these countries, but faster in Estonia. The transition in the Baltic countries is to join the Great Depression as one of the most important economic events of the last century.

In the period of 1991-2001 the real GDP growth in the Baltic countries was negative: in Estonia was -0.2 per cent, in Lithuania - -2.4 per cent and in Latvia - -2.7 per cent. For example, Poland was marked by the fact that it experienced only two years of negative growth and achieved 4.5 percent of the real GDP growth in the period 1991-2001. For the same period the real GDP of Hungary and the Czech Republic economies grew at the rate of 3.1 percent and 1.6 per cent yearly. In the period of 1991-2001 the yearly average growth of real GDP in OECD countries was 2.8 per cent. These figures put the Baltic regions on a slower pace towards the establishment of the pension funds system in comparison to Eastern and Central European countries.

The first years of the transition were marked by an extraordinary increase in size of the informal sector or "hidden" economy. These factors should be kept in mind during the following discussion.

# 4. Why the initial collapse?

The dramatic growth slowdown of the economies of the Baltic States is also useful to shed light upon the overall economic conditions at the brink of the collapse, which is circa 1989. This is of great importance for our analysis because one main question which the literature on the growth performance of transition economies in the 1990s attempts to answer is the relative importance of initial conditions vis-à-vis crucial reforms. Understanding of the role of initial conditions in the major economic reforms can better prepare for the pension system reform.

Growth figures are helpful in depicting the collapse. It provides for a decomposition of GDP growth and involves identifying the individual contributions of various factors to overall economic growth. The question which this methodology argues is how important is factor accumulation relative to improvements in the efficiency with which capital, labour and other factors of production are used. The growth rate of total factor productivity (TFP) is conventionally computed as a residual, as that share of overall growth that cannot be accounted for by increases in quantities of inputs alone. We use calculations from Campos and Coricelli (2002) because it is closer to our intuition as researchers from Baltic regions. (Moreover, the shares of labour and capital are assumed to be

0.7 and 0.3, respectively). Coricelli and Campos present some significant results on the dependence of the effects of reform policies on initial conditions and on institutional development.

Table 3

Growth Accounting Results for Former Soviet Union Countries,
1970-1997

| TFP growth   | Factor growth                           | Output growth                     |
|--|---|-----------------------------------|
| Estonia Avg. 1971-97<br>0.2<br>Avg. 1971-1990<br>1.9<br>Avg. 1971-80   | 0.9                                     | 1.1<br>5.4<br>3.8                 |
| 1.4<br>Avg. 1981-90<br>0.5<br>Avg. 1991-97   | 2.4<br>1.0<br>-1.2                      | 1.6                               |
| Latvia Avg. 1971-97<br>-0.4<br>Avg. 1971-1990<br>2.7<br>Avg. 1971-80<br>1.4<br>Avg. 1981-90<br>1.3<br>Avg. 1991-97           | 0.3 3.2 2.2 1.0 -3.4                    | -0.1<br>5.9<br>3.6<br>2.3<br>-8.6 |
| Lithuania Avg. 1971-97<br>0.3<br>Avg. 1971-1990<br>2.3<br>Avg. 1971-80<br>0.0<br>Avg. 1981-90<br>2.3<br>Avg. 1991-97<br>-4.5 | 0.8<br>1.1<br>4.2<br>2.8<br>1.4<br>-1.8 | - 6.5<br>2.8<br>3.7<br>-6.3       |
| FSU AVERAGE Avg. 1971-97 1.3 Avg. 1971-1990 1.0 Avg. 1971-80 1.0 Avg. 1981-90 0.0 Avg. 1991-97 -6.4                          | 0.0<br>4.4<br>2.9<br>1.5<br>-1.3        | -1.3<br>5.3<br>3.8<br>1.5<br>-7.7 |

V.Katkus, R.Lazutka. The Establishment of the Pension Funds System in the Baltic States.

| *CEE        | AVERAGE Avg. 1971-95 | 2.1  | 1.2          |
|-------------|----------------------|------|--------------|
| Avg.        | 1971-1990            | 2 2  | 6.4          |
| 4.1<br>Avg. | 1971-80              | 2.2  | 5.9          |
| 3.3<br>Avg. | 1981-90              | 2.5  | 0.5          |
| 0.8<br>Avg. |                      | -0.3 | -1.1         |
| -1.2        | 1991 93              | 0.1  | <b>+ •</b> + |

 $\textbf{Source:} \ \textit{Growth in Transition: What We Know, What We Don't, and What We Should}$ 

By: Nauro F. Campos and Fabrizio Coricelli William Davidson Working Paper Number 470

February 2002. P. 8,9.

\*CEE - Bulgarija, Cekija, Kroatija, Lenkija, Rumunija, Slovakija, Slovenija ir Vengrija.

In the period of 1971-1990 Lithuania has the highest average output growth rate (6.5 per cent) in the Baltic region and higher than the FSU and CEE averages (accordingly 5.3 per cent and 6.4 per cent). In the period of 1981-1990 on the eve of economic reform the Lithuania TFP (2.3 per cent) and the Latvian TFP (1.3 per cent) were higher than the averages in FSU and CEE (accordingly 0.0 per cent and 0.8 per cent). In comparison to the declines in the FSU and CEE countries these two economies at that time were very efficient in the Soviet Union system. The higher TFP in Latvia and in Lithuania can be explained by better exploration of the Soviet-type economy and can reflect deeper integration in inter-enterprise arrears (Table 3).

Big enterprises usually were closely connected to the partners providing supplies and receiving goods in other Soviet republics. Allied enterprises in the Union were squaring their accounts in Moscow. That is why Estonian allied companies, in respect of which decisions were taken in the centre, made up to 13 per cent of all the industrial companies, in Latvia - 35 per cent, and in Lithuania - 40 per cent (Hansen and Sorsa). This proves that Lithuanian and Latvian companies were more integrated in the economy of Soviet Union, that Estonian ones.

From our point of view the so-called phenomenon of disorganization was at the heart of the disruption of the Soviet-type economy, but not the "credit crunch". At this time the banks played little role in the economy. Blanchard and Kremer (1997) claims that disorganization was an important reason for output collapse especially in countries of the FSU. Disorganization is defined as the break down of economic relations of the old regime, relations that cannot be replaced overnight by new ones. The main concept underlying this view is "specificity" in economic relations between firms. The period of central planning was one of extreme specificity, as firms were locked in relationships with a small number of

firms, in many cases only with one firm. Firms did not need to accumulate any information on other firms and in particular had no information on the ability and willingness to pay of their customers. Production chains link firms to several depending on the degree of complexity suppliers, production. Higher complexity implies a larger number of inputs. In the decentralised system prices are set through a bargaining process. Customer firms, generally enterprises at the start of reforms, make an offer price to their suppliers. If such price is below the reservation price of the supplier (e.g. the outside option for the supplier), the latter does not provide inputs to the state firm and, thus, output falls. Assuming strong complementarities production, even the lack of one input implies impossibility to produce.

Also, it took from two to five years for the Baltic countries to find new suppliers and new markets for the products. After initial collapse of foreign trade in early 1990, recovery of export of both goods and service has been good. Since the start of transition in 1990-1991 the direction of the Baltic trade has change dramatically. Europe has become their trading partner, as the collapse of the trade in Russia and the other FSU countries was replaced by export to new countries. In 1996, over 51 per cent of Estonia's, 44 per cent of Latvia's and 33 per cent of Lithuania's export went to EU, compared to nearly none at the start of transition. In 2002 all export of the Baltic countries made up more than 50 per cent of total export to EU.

The product pattern of trade was gradually changed. Initially, the Baltic States with EU countries exchanged raw materials - their own, such as wood, or re-exported, such as petroleum and metals - against machinery and other consumer goods. Trade related to processing of goods, such as textiles and clothing from EU raw materials, has emerged in all three countries. In addition to textiles, various machinery products are now processed in Estonia, Latvia and Lithuania which exploit its low-cost but highly skill labour. With the gradual increase in real wages and productivity, its structure of trade is gradually moving closer to that of industrial countries.

Export has recovered from "old industries" (food, textile, machinery), suggesting that restructuring may have taken place during transition and they exploiting preceding markets link and know-how. Restructured "old industries" are still at the heart of the export-oriented industry but slowly increasing the share of "new industries" (telecommunication, biotechnology, software).

The implication of disruption of Soviet-type economy mechanism was that output decline was worse in the countries that started reforms from a more rigid system of central

planning. This is the case for Latvia and Lithuania. Until now these two countries have bigger foreign trade share with Russia and CIS countries compared to Estonia. This reflects older pattern of trade, better diversification of foreign trade and better know-how of Eastern markets.

The vast majority of analyses made conclusions that the decline was large and often say or imply it has been surprisingly large. In a sense, Berg and others (1999) do propose an answer, saying initial conditions explain not only the variation across the Eastern block countries, but the actual decline as well, and that policy reforms do nothave any further negative impact on output levels. We agree that initial conditions played crucial role, but we disagree on the perception of reform process. Contrary to Berg and others position we argue that policy reform especially the chosen form of privatisation has tremendous influence for further negative impact on Baltic countries output fall.

In 1990-1994 the core of reforms in Baltic States was privatisation which put region countries on the different path of the development.

# 5. Macroeconomic stability

#### 5.1. Inflation

Macroeconomic stability and low inflation are essential because neither the securities markets nor institutional investors can function efficiently under high and volatile inflation. Although the use of inflation-indexed instruments may mitigate the problems caused by moderate inflation, any indexation mechanism would tend to break down in the presence of high and accelerating inflation.

Now there is a strong consensus that financial stabilization, and inflation control in particular, is a necessary first step before sustainable growth can occur. In 1992-1993, the Baltic States introduced their national currencies (Table 4).

Table 4 When were national currencies introduced?

| Country<br>National | currencies |              |                 |                        |
|---------------------|------------|--------------|-----------------|------------------------|
| payment             |            | Beg<br>Curre | ginning<br>ency | Single instrument of   |
| Estonia             | ō          | June 20,     | 1992            | June 20, 1992<br>Krona |

V.Katkus, R.Lazutka. The Establishment of the Pension Funds System in the Baltic States.

| Latvia    | May 7, 1992            | July 20, 1992<br>Latvia's |
|-----------|------------------------|---------------------------|
| rouble    | March 5 1002           | 0.01.15.1.10              |
| 1993      | March 5, 1993          | October 18,<br>Latas      |
| Lithuania | May 1, 1992<br>Coupon  | October 1, 1992           |
| 1993      | June 25, 1993<br>Litas | August 1,                 |
| 1993      | Litas                  |                           |

Source: Bank of Estonia; Bank of Latvia; Bank of Lithuania.

The region chose stabilization, which was based on the exchange rate. Among transition economies, Estonia first introduced a currency board in 1992, followed by Lithuania in 1994. The currencies of almost all countries using currency arrangements have been pegged to some international currency. The anchor currency has been the US dollar in the Lithuanian case, although Estonia has opted for the German mark. In 1994, the Bank of Latvia pegged its national currency to the SDR basket of currencies and keeps the exchange rate fixed through passive interventions in the forex market (Table 5).

Most transition countries have introduced a currency board in response to severe macroeconomic imbalances. The one possible exception is Lithuania where the external value of currency had been stabilized before the currency board was implemented.

Since the beginning of 2002 the Estonian and Lithuanian national currencies are pegged to the Euro.

Table 5
Introduction of Currency Board Arrangement in the Baltic
Countries

| Country              |       | Eo     | change rat      | е :      | Introduc | tion |        | Objective     |
|----------------------|-------|--------|-----------------|----------|----------|------|--------|---------------|
| Responsi             | ble   |        | Of              | ficial   |          |      |        |               |
|                      |       |        | mechani         | sm       | d        | ate  |        |               |
| institut             | ion   |        |                 | parit    | У        |      |        |               |
| Estonia              |       | Cui    | rrency          |          | 1992     |      |        | Stabilization |
| of                   | The   | Bank o | of 8 EEK        | = 15.    | 64664 EE | K =  |        |               |
|                      |       |        | board           |          |          |      |        |               |
| macro-ec             | onomy |        | Estonia         |          | 1 DEM    |      | 1 EUR  | •             |
| Latvia               |       |        |                 | Fixed    |          |      |        | 1994          |
| Stabiliz             | ation | of     | The Ba          |          | SDR**    |      |        |               |
|                      | l     |        | rate            | <b> </b> |          | l    | ı      |               |
| macro-ec             | onomy |        | Latvia          |          |          |      |        |               |
| T 2 L L 2            |       | G.     |                 |          | 1004     |      |        |               |
| Lithuani<br>The Bank |       | 4 Li   | rency           | 4528LTL  | 1994     |      |        | Stabilization |
| THE Dally            | . 01  | 4 D    | ь – з.<br>board | 4270717  | _        |      |        | of            |
| macro-ec             | onomy | I      | Lithuania       | 1        | USD      | 1    | EUR*** | 01            |
|                      |       |        |                 |          |          |      |        |               |

<sup>\*</sup>Since January 1, 2002

<sup>\*\*</sup>Lats may fluctuate +/- 1 per cent in respect to anchor currency

\*\*\*Since February 2, 2002

Source: Bank of Estonia; Bank of Latvia; Bank of Lithuania.

We focus on stabilization since we are mainly interested in the expansionary effects on GDP growth, consumption, and investment. A more recent paper (Khan and Senhadji, 2000) analyses this relationship separately for industrial countries and developing countries and finds that "the threshold level of inflation above which inflation significantly slows growth is estimated at 1-3 percent for industrial countries and 7-11 percent for developing countries." Above that rate, inflation and growth are negatively related. The Baltic countries were the fastest among all former Soviet Union countries to reduce inflation. Already in 1997, due to the introduced national currency and currency board arrangement in 3-4 years period of time Estonia managed to curb the inflation rate down to 11.2 per cent, Lithuania - 8.9 per cent, and Latvia - 8.4 per cent.

Table 6
Inflation in the Baltic Countries in 1990-2001

| 1996 1               | 997  |       | 990 199<br>9 2000 |        | 2 1993 | 1994 | 1995 |
|----------------------|------|-------|-------------------|--------|--------|------|------|
| Estonia              |      |       |                   |        | 89.8   | 47.7 | 29.0 |
| 23.1                 | 11.2 | 8.2   | 3.3               | 4.0    | 5.8    |      |      |
| Latvia               |      | 10.5  | 172.2             | 951.2  | 109.2  | 35.9 | 25.0 |
| 17.6                 | 8.4  | 4.7   | 2.4               | 2.8    | 2.4    |      |      |
| Lithuania            |      | 8.4   | 224.7             | 1020.5 | 410.4  | 72.1 | 39.6 |
| 24.6                 | 8.9  | 5.1   | 0.8               | 1.0    | 1.3    |      |      |
| Central and          | di.  |       |                   |        |        |      |      |
| Eastern Eu           |      |       |                   |        |        |      |      |
| And Baltic           |      |       |                   |        |        |      |      |
| Countries:<br>Median |      | 22 1  | 117 7             | 207.2  | 35.3   | 20.0 | 25 0 |
| 17.6                 |      | 8.0   | 4.2               |        | 5.5    | 34.4 | 25.0 |
| Average              |      | 204.0 | 118.5             | 445.3  | 251.3  | 38.7 | 20.5 |
| 15.2                 |      | 8.4   | 5.2               | 6.5    | 5.5    | 30.7 | 20.3 |
| CIS:                 |      |       |                   |        |        |      |      |
| Median               |      | -     | 93.4              | 1064   | 1426   | 1616 | 251  |
| 44                   | 17   | 11    | 26                | 20     | 11     |      |      |
| Average              |      | _     | 108.1             | 1055   | 1827   |      | 350  |
| 151                  | 34   | 19    | 48                | 29     | 17     |      |      |

Source: EBRD Transition report update 2002, p. 18.

On the eve of establishing pension fund system in the Baltic States (2001), the inflation rate amounted to 5.8 per cent in Estonia, 2.4 per cent in Latvia and 1.3 per cent in Lithuania, which is far less than the inflation median in the Central and Eastern Europe of 5.5 per cent (Table 6).

## 5.2. Current accounts and financial flows into the Baltics

The full convertibility of current accounts was established at the same time in all Baltic countries: in Lithuania - May 1994, in Latvia - June 1994 and in Estonia - August 1994. They all decided to liberalize their capital accounts before they had a fully developed and supervised financial system. The strategy was very risky, because of external shocks to banking systems.

Table 7
Current account balances in the Baltics, 1994-2001 (per cent of GDP)

|           | 1994 | 1995  | 1996 | 1997  | 1998  | 1999  | 2000 | 2001  |
|-----------|------|-------|------|-------|-------|-------|------|-------|
| Estonia   | -7.2 | -4.4  | -9.2 | -12.2 | -9.2  | -4.7  | -6.4 | -6.5  |
| Latvia    | -0.2 | -3.6  | -4.2 | -6.1  | -10.6 | -9.6  | -6.9 | -10.1 |
| Lithuania | -2.1 | -10.2 | -9.1 | -10.2 | -12.1 | -11.2 | -6.0 | -4.8  |

Source: Bank of Finland Institute for Economies in Transition, BOFIT

External debt, in particular public one, remains small as countries started with zero debt. The original zero debt level has facilitated running quite sizeable foreign deficits without overly loss of credibility. Relative to GDP, Baltic foreign debts have risen since. The ratio of foreign debt to GDP was in 1994 16.5 per cent for Estonia, 22.6 per cent for Latvia and 12.4 per cent for Lithuania. The figures had risen to 60.9, 70.9 and 43.8, respectively, by 2001. Most of this debt is private and the biggest one in Estonia. Still, the debt burden relative to export revenue remains very modest in all countries. External debt service cost relative to current account revenue was in 1994 1.6 per cent in Estonia, 3.9 in Latvia and 2.3 in Lithuania. In 2001, the figures were 7.2, 14.7 and 28.0 per cent, respectively (EBRD, 2002).

Lithuania has been somewhat of an exception. Due to larger budget deficits, the country has bigger government T-bill markets than its northern neighbors. Also, until 1997 the country was less able to finance its current account deficit by direct investment, and consequently accumulated a bigger foreign debt. Later, largely due to accelerated privatization to foreigners, the situation changed.

The financial Russian crisis in 1998 has the same negative effect on all Baltic's government budget balances – they increased by 4 per cent and took one year to accommodate the external shock (Table 8).

Table 8 General government budget balances in the Baltic's, 1994-2001 (per cent of GDP)

|           | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 |
|-----------|------|------|------|------|------|------|------|------|
| Estonia   | 1.3  | -1.3 | -1.9 | 2.2  | -0.3 | -4.7 | -0.7 | 0.4  |
| Latvia    | -4.0 | -3.9 | -1.7 | 0.1  | -0.8 | -4.0 | -2.8 | -1.8 |
| Lithuania | -5.5 | -4.5 | -4.5 | -1.8 | -5.8 | -8.2 | -3.3 | -1.4 |

Source: Bank of Finland Institute for Economies in Transition, BOFIT.

In our analysis the economic impact of foreign direct investment (FDI) in Baltics we will assess by factors such as the impact on the capital account, the contribution to privatization and the development of the financial sector.

We can compare the structure of capital flows into the Baltic countries with those of peer group (Croatia, the Czech Republic, Estonia, Hungary, Poland and Slovenia). Baltic's capital flow structure is quite similar to that in the peer group, though the share of "other investment" is notably high (Table 9).

Table 9 Structure of Gross Capital Inflows into Selected Transition Economies, 1990-1999

|                                       | FDI  | Portfolio<br>Investment | Other<br>Investment |  |
|---------------------------------------|------|-------------------------|---------------------|--|
| Estonia                               | 41.8 | 17.1                    | 41.2                |  |
| Latvia                                | 37.7 | 4.5                     | 57.8                |  |
| Lithuania                             | 34.9 | 13.1                    | 52.0                |  |
| Mean First Round Accession Candidates | 57.2 | 22.4                    | 20.4                |  |

Source: Pekka Sutela, 2002.

In the Estonian case, however, much and probably most such credit is handed by a foreign owner to an Estonian-based daughter company or might at least be explicitly or implicitly guaranteed by such a foreign owner. Thus, there is no reason to regard such credits as being necessary any less stable than those statistically recorded as being long-term. The share of other investments (bank loans and trade credit) is particularly in Latvia even greater than in Estonia. That at least partly reflects the traditional role of Latvian banks in channeling Russia and other CIS monies into international financial markets. The high share of other investments into Lithuania is more difficult to explain, but may well reflect foreign bank finance in the absence of domestic supply (Sutela, 2002).

Taking in mind the specific "other investments" in the Baltic's we can say that level of the foreign direct investment in Estonia, Latvia and Lithuania has often been more than enough to finance the current account deficit.

# 5.3. Foreign direct investment and privatization

Foreign capital could not only bridge the possible current account gap but also help in restructuring and modernizing transition economies. One of the main challenges of transition is the replacement of the old capital stock with a new one.

Voluntary savings during the transition, carried out by households and private enterprises in the Baltic's economy, would tend to be lower. Thus, the expectation was that new domestic market forces would improve investment efficiency but sustain investment rates at lower levels. On the other hand, the process of economic transformation would require additional investment to account for restructuring and for the upgrading of outdated products and production processes. Thus, new investments in physical capital represent one of the main engines of growth in transition economies.

In order to trace the actual behavior of foreign participation during the transition, in what follows we analyze data some aggregate FDI indicators.

Direct foreign investments into the Baltic countries are closely related to the privatization process. Initial approaches to the privatization were significantly shaped by political considerations. In the region prevailed two different approaches how to handle privatization process. One resulted in large-scale privatization being based on voucher-based programs and generous concessions being made to insiders (existing managers and workers) as way to ensure support for continued reforms.

Second approach focuses on economic factors. This form of privatization that has clearly contributed to improving the post-privatization performance of enterprises is the sale of assets to strategic investors. The first way was chosen by Latvia and Lithuania and the second way by Estonia.

The privatization agency needed to execute direct sales through tenders and auctions. The establishment of such agency reflects the beginning of medium or large-scale privatization focused on the effectiveness of post-privatization corporate governance and the generation of revenue from privatization. The Estonian Privatization Agency was established as the first in region in 1993, the Latvian Privatization Agency – in 1994 and the Lithuanian State Privatization Agency – in 1996.

For instance, the slower more individualized (by firm) Estonian approach appears now to have been more successful than the more rapid Lithuania voucher scheme. The improvement in post-privatized company's government is being driven largely by the changing behavior of controlling shareholders and managers who beginning to act in ways that increase share values rather than to strip corporate assets and income for private gains.

The key to success was the higher concentration of the shareholders in privatized enterprises. Such process was quicker with the help of foreign investors. In Lithuania after privatization with vouchers the concentration shareholders took longer and this process delayed restructuring of the privatized companies.

The concentration of the shareholders has also negative consequences. Many of the previously privatized firms in Baltic States were purchased by foreign investors that bought out minority shareholders, converting them into closely-held companies, and in many cases de-listed them from the exchanges.

Now in Estonia and Lithuania large-scale privatization is close to completion although the state continues to retain shares in some large infrastructure (electricity, gas supply, railway etc.) and strategic enterprises. In Latvia the privatization process going on.

In absolute terms the greatest privatization revenue USD 2.8 billion has been achieved by Lithuania, what reflects biggest Baltic's economy and attractiveness of the assets on offer. Estonia has realized the largest privatization receipts per capita USD 1,637 and was higher than the average in Central and Eastern Europe (Table 10).

Table 10
Direct Foreign Investments (USD, million)

| Aggregate Country                         | Aggregate | 1990     | 1991     | 1992 1993 | 199 | 4 1995      | 1996      | 1997 | 1998 |
|---|-----------|----------|----------|-----------|-----|-------------|-----------|------|------|
| 1999 2000                                 | 2001      | DFI      |          | DFI       |     |             |           |      |      |
| inflow                                    | inflow    | I        |          |           |     |             |           |      |      |
|   |           |          |          |           |     | pe          | ercapita  |      |      |
|   |           |          |          |           |     | (1          | .989-2001 | _ )  |      |
| Estonia                                   |           | _        |          | -         | 80  | 156         | 212       | 199  | 111  |
| 130 574<br>Latvia                         | 222       | 324      | 350<br>- | 2,358     | _   | 1,637<br>50 | 279       | 245  | 379  |
| 515 303<br>Lithuania                      | 331       | 398<br>- | 300      | 2,798     |     | 1,200       | 31        | 72   | 152  |
| 328 921                                   | 478       | 375      | 450      | 2,837     |     | 771         |           |      |      |
| Central and<br>Eastern Euro<br>And Baltic | ope       |          |          |           |     |             |           |      |      |
| States<br>98.297                          | 1.365     |          |          |           |     |             |           |      | *    |
| CIS**<br>34.368                           | 196       |          |          |           |     |             |           |      |      |

<sup>\*</sup> the Check Republic, Estonia, Croatia, Latvia, Lithuania, Poland, Slovakia, Slovenia and Hungary.

Accumulated income from privatization is the main financial source, which was used for funding the deficit of the pension reform transition period. In this case, Latvia enjoys a better situation than Estonia and Lithuania as the pension reform has started already, whereas privatization still goes on. Thus, the means received from privatization may be directly used for pension reform transition period deficit financing. For example, Lithuania has appropriated quite a share of privatization funds for other purposes.

Table 11 Cumulative privatization receipts/GDP (per cent)

| Country | 7    |      | 1992 | 1993 | 1994 | 1995 | 1996 |
|---------|------|------|------|------|------|------|------|
| 1997    | 1998 | 1999 | 2000 |      |      |      |      |

<sup>\*\*</sup> Armenia, Azerbaijan, Belorus, Georgia, Kazakhstan, Kirgizstan, Moldova, Russian Federation, Tadjikistan, Turkmenistan, Ukraine and Uzbekistan. **Source:** EBRD Transition report update 2002, P 24.

V.Katkus, R.Lazutka. The Establishment of the Pension Funds System in the Baltic States.

| Estonia | L   |     | _   | 1.0 | 2.6 | 4.1 |
|---------|-----|-----|-----|-----|-----|-----|
| 5.3     | 6.3 | 7.1 | 8.2 | 8.8 |     |     |
| Latvia  |     |     | _   |     | _   | 0.3 |
| 0.7     | 0.8 | 2.2 | 3.3 | 3.5 | 4.1 |     |
| Lithuan | iia |     | _   | 0.9 | 1.3 | 1.4 |
| 1.4     | 1.6 | 6.9 | 8.0 | 9.8 |     |     |

Source: EBRD Transition report 2001, P 140, P168, P 172.

Foreign direct investors have financed the bulk of their investments in Baltic's through equity capital. Some part of FDI in this region is related to the privatization of state-owned companies. The ratio cumulative privatization receipts/FDI gives good indication about green fields investments and expansion rate of the enterprises. At the end of 2000 in Latvia this ratio was 11.6 per cent, in Estonia – 22 per cent and in Lithuania – 46.4 per cent. It's clear that most FDI comes to Lithuania in order to acquire partial or full ownership of privatized companies. Latvia has the best ratio.

# 6. Deindustrialisation in the Baltic countries

The structural characteristics of employment are one of the main indicators of the development of a country in the long run. The share of industry, agriculture and services in global employment are factors commonly taken as indicators of a country's place on an evolutional ladder. In the context of economic transition, it has been standard to link the process of development to the shifts in employment structures in terms of the public (old) and private (new) sectors.

In standard analysis the efficiency of market reforms is measured by the size of the private (new) sector. The primary problem is that the size of the private sector is seen as a one-dimensional endogenous outcome of other policy variables, macroeconomic and fiscal policies. However, the speed of privatisation has always been a direct policy decision. Moreover, it was not a one -dimensional choice. (We will discuss this problem more detailed in another chapter.)

Lithuania follows the prescriptions based on the naïve view of economic transition as a process of 'creative destruction' that should proceed as fast as possible. In 1990-1995 Lithuania has the fastest speed of privatisation in Baltic States and later suffered deep output fall and structural unemployment. In Latvia the fall of the production output was even more drastic.

Estonia chooses different privatisation strategy by selling companies directly to strategic investors. The Estonian ratio of private sector/GDP becomes 65 per cent as in Lithuania only in 1995 (Table 12). The speed of privatisation in Estonia later increased more than in Lithuania.

Latvia used the same privatisation model as in Lithuania, but they started later.

Table 12

|               | Pı      | rivate S | ector | Share in     | GDP ( | per cen    | t)   |      |
|---------------|---------|----------|-------|--------------|-------|------------|------|------|
| 1997          | 1998    | 1999     | 2000  | 1992<br>2001 | 1993  | 1994       | 1995 | 1996 |
| Estonia<br>70 | a<br>75 | 75       |       | 22<br>75     | 75    | 30<br>75   | 45   | 65   |
| Latvia        | 62      | 65       |       | n.a.<br>66   | _     | n.a.<br>66 | 34   | 53   |
| Lithuan<br>68 |         | 70       |       | 37<br>70     |       | 70         | 62   | 65   |

Source: Central Statistical Bureau of Latvia; Statistical Office of Estonia; Department of Statistics of Lithuania.

A difference in privatisation methods has led to different outcomes in terms of productivity and the dynamics of output. It is better to look at economic transition as a shift from the old to the new industrial structure of output, rather than a transfer from the state to the private sector.

We use analysis apparatus developed by Mickiewicz and Zalewska (2002). They demonstrate that theoretical analysis of structural employment adjustments that the deindustrialisation model developed by Rowthorn and Wells (1987) for developed countries can be successfully applied to explain contraction of the industry sector experienced by post communist countries during transition. Mickiewicz and Zalewska took sector productivities differentials as the driving force of structural changes. Reallocation of employment to services (deindustrialisation) represents a mixture of a shift towards more efficient production structures and a response to the shifting pattern of demand. They link the high productivity of a sector with its successful restructuring. They conclude that there are two possible outcomes of structural transformation. An "efficient" outcome is one where the restructuring takes place in both the industrial and agricultural sectors, i.e. productivities of both sectors are high. In this deindustrialisation is not so drastic. Moreover, the service sector grows and the agricultural sector decreases. A country following this path changes its employment structure towards those observed in developed countries. In contrast, a country which followed the "inefficient" path of structural adjustment (caused by low productivity of agriculture and/or industry as a result of badly implemented reforms) is characterised by the lower size of the service sector as compared with the "efficient" case. It is followed by deep deindustrialisation and an increase in employment in the agricultural sector. Both of those theoretically defined structural development outcomes are observed in the Baltic States.

Based on the findings Mickiewicz and Zalewska we use three sectors (industry, agriculture and services) to the analysis.

In 1990 the initial structure of employment in Estonia and Latvia was similar, but slighter different in Lithuania.

In 1995 the private sector in Estonia and Lithuania was the same size, but the employment structure has grater difference. During the first five years, Estonia has gradually decreased its employment share of the total employment to reach 9.3 per cent at the beginning 1995.

In Latvia employment structure became closer to Lithuania.

In the Lithuanian and the Estonian case we can see that a difference in privatisation methods has led to different outcomes in terms of employment.

In 2000-2001 the employment structure in Latvia and Lithuania clearly converge and they become different from Estonia employment structure (Table 13).

Table 13 Employment according to activity sectors in the Baltic States, per cent

| 1000     | 1000              |      |      | 90 1995 | 5 1996 | 1997 |
|----------|-------------------|------|------|---------|--------|------|
| 1998     | 1999              | 2000 | 2001 |         |        |      |
| Estonia: |                   |      |      |         |        |      |
| Agricult | ure               |      | 16.9 |         | 9.3    | 8.9  |
| 8.1      |                   | 7.6  | 6.7  | 6.4     |        |      |
| Industry | -                 |      | 25.7 | 24.9    | 24.0   | 22.2 |
| 21.8     | 21.3              | 22.7 | 23.3 |         |        |      |
| Building |                   |      | 8    | .0      | 5.4    | 5.7  |
| 7.3      | 7.3               | 6.8  | 7.0  | 6.9     |        |      |
|          |                   |      |      |         |        |      |
| Latvia:  |                   |      |      |         |        |      |
| Agricult | ure               |      | 16.5 | 17.9    | 17.8   | 18.0 |
| 17.1     | 16.5              | 14.7 |      |         |        |      |
| Industry | -                 |      | 26.5 | 18.5    | 17.7   | 18.0 |
| 16.4     | 15.8              | 16.2 |      |         |        |      |
| Building |                   |      | 9.7  | 7       | 5.4    | 5.7  |
| 5.8      | 6 <sup>1</sup> .0 | 6.2  | 6.3  |         |        |      |
|          |                   |      |      |         |        |      |
| Lithuani |                   |      |      |         |        |      |
| Agricult | ure               |      | 19.4 | 23.8    | 24.2   | 21.8 |
| 21.5     |                   | 19.9 | 17.8 |         |        |      |
| Industry |                   |      | 30.6 | 18.4    | 17.4   | 17.3 |
| 17.3     |                   | 17.7 | 17.9 |         |        |      |
| Building |                   |      | 11.3 |         | 5.9    | 7.2  |
| 7.1      | 7.1               | 6.6  | 6.1  | 6.2     |        |      |
|          |                   |      |      |         |        |      |

Source: V.Katkus calculations based on statistic's of Central Statistical Bureau of Latvia, Statistical Office of Estonia, Department of Statistics of Lithuania.

In the case of the Baltic States we can see that the level of employment in the industrial sector alone does not indicate successful reforms. To assess the restructuring efforts one must inspect the level of employment in agriculture (low) and services (high). Deep deindustrialisation is not an indicator of an optimal path of transition. Estonia and Lithuania give

arguments that it is the direction, not the magnitude of change that matters. This is also demonstrating that reforms of the agricultural sector play a significant role in placing a transition country on a development path that guarantees convergence to EU employment structures (Table 14). Eurostat based its calculations on 2000 in Estonia 67.5 percent of labour is active in industry and the service sector. In Latvia this indicator is 61 percent and in Lithuania 59.5 percent.

Table 14
Decrease in employment in the Baltic States in 1990-2001, per cent

| Lith            | luania | Estonia | Latvia | *   |
|-----------------|--------|---------|--------|-----|
| Agriculture     |        | 0.5     |        | -74 |
| -34<br>Industry |        | -25     |        | -37 |
| -55             | '      | -49     |        | -41 |
| Building<br>-52 |        | -55     |        | -41 |

<sup>\*</sup> Latvia - in 2000.

Source: V.Katkus calculations based on statistic's of Central Statistical Bureau of Latvia, Statistical Office of Estonia, Department of Statistics of Lithuania.

On the eve of transition process the political decision at the speed and form of the privatisation has long lasting consequences for the whole economy which lead to divergence of the development in the Baltic States.

Today these consequences made the Lithuanian government more cautious toward the pension system reform pace and the Estonians more radical. In the Baltic States policymakers are too heavy conditioned by what happened in the past.

### 7. Capital accumulation

One of the main challenges of transition is the replacement of the old capital stock with a new one. Thus, new investments in physical capital represent the main engine of growth in transition economies. Enterprises can finance gross fixed capital formation by retained earnings or by obtaining new credit or by issuing new equity or bonds on the capital markets.

The two private financing sources external to the firm (new credit and capital market financing) can be further divided by origin to domestic and foreign financing. The major domestic external financing sources include new domestic credit from local banks and other

financial institutions and new equity and bonds issued on the local capital markets and acquired by domestic investors. The major foreign external financing options for enterprises include new foreign credit, new equity and bonds issued abroad, new equity issued on the local capital markets and acquired by foreign investors, and foreign direct investment, i.e., foreign investor acquiring more than 10 per cent share in the company.

The corporate investment is currently mostly financed through internal sources. The companies in Baltic States put financing hierarchy in follow order: financing internally is preferred over local bank borrowing, local bank borrowing is preferred over issuing bonds in the local capital market, and issuing bonds is preferred over issuing shares in the local market. Non-bank funding sources are not open to all companies, in particular small and medium-sized firms.

Capital income taxation system has a considerable impact on the development of the capital market. Usually, a capital income taxation system is characterised by interest, dividends and reinvested profit tax rates. If the rates of the latter taxes differ, it means that capital taxation system is not neutral. For example, if the tax rate on received interest is relatively lower than other capital revenues, then the investors are stimulated to invest into the fixed payments financial instruments (bonds, bank deposits, etc.), instead of shares. As a result, a "shallow" capital market is developed. In other words, capital income tax rates change relative prices at the capital market, and therefore, influence the size and composition of savings and investments.

Capital tax base also has a strong influence on the behaviour of the investors. In particular the international differences between the amortization deductions on equipment and buildings, reserves evaluation methods, exceptions for investments into some industry or service sectors, etc. may change the size of capital income size in enterprises, which alike, however operating in different countries. Therefore, capital taxation in different countries may be larger, although capital tax rates are even (OECD, 1991). In order to assess the possible influence of the capital income tax rates and capital income tax base on investments, the effective tax rate is calculated.

The effective tax rate is an approximate changeable figure, which allows integrating different rules on taxation of investment. Every method has its advantages and disadvantages. As three is no unified calculation methodology (OECD, 2000) at present, we will only consider capital income tax rate increase in Estonia, Latvia and Lithuania.

Company's profit may be divided into the paid profit to shareholders (dividend) and profit to be left in the company (reinvested profit). A zero tax rate was applied on reinvested profit in Estonia and Lithuania. Since 2001 this tax rate was increased up to 15 per cent in Lithuania, whereas in Estonia it remained unchanged. Such a fiscal policy stimulated the use of internal financial resources in enterprises. It has impeded the development of capital market.

# Capital Tax Rates in Baltic Countries in 2001, per cent

Interest income
Dividends Reinvested profit

Estonia
0
Latvia
Lithuania 15\*

FDI into the Baltic States has been attracted by the promises of Governments to give exemption on capital income taxes and reinvested earnings taxes. These governmental regulations gave competitive advantages in the local markets for the companies with foreign capital. Also FDI help to create the "shallow" capital markets in the Baltic countries.

The effect of "shallow" capital market reduces the capital income taxes, diminished the level of company's liquidity, creates undercapitalised enterprises and creates constrains for new companies in borrowing debt financial instruments (bills, bonds) in the market.

A tax system, which promoted reinvestment of company's profit instead of issue of new shares, creates a lock-in effect, which is useful for present companies, but encumbers the new companies financing. Thus, capital market becomes less flexible. Such a capital market is more directed towards the past, i.e. in supporting existing companies, but not in the future, which would promote the establishment of new enterprises.

These early mentioned constrains upon development securities markets and small size of economies can explain why deep and liquid markets for non-bank funding are not developed in the Baltic countries.

Companies' different attitude toward financing sources creates different financial structure in the countries.

# 8. Growth and financial intermediation

The positive association between financial-sector development and economic growth is now a well-documented fact. Since Goldsmith (1969) found that the level of financial development, defined as financial intermediary assets divided by GDP, was positively

associated with growth, numerous authors have found positive correlations between differing indicators of financial development and growth.

Links between financial systems and economic growth occur through one or more of three basic functions served by the financial sector in an economy: (1) the provision of adequate instruments for saving; (2) the channelling of resources from savers to borrowers (the resource allocation function); and (3) the reallocation of resources when their current uses are no longer the most profitable.

Savings flowing into the financial sector may be increased by improvements in the liquidity and breadth of financial assets, reductions in information asymmetries between firms and outside investors, increases in the returns on financial instruments, and by reductions in transactions costs related to financial assets. An increase in savings can increase growth by permitting an increase in investment.

The efficiency with which the financial sector performs the allocation function i.e., the selection and monitoring of firms and projects receiving external finance will also affect a country's growth rate.

Finally, the efficiency with which the financial system reallocates resources from unprofitable to profitable uses will affect economic growth.

Each of the dimensions of the financial sector can influence economic growth through their impact on any or all of the three functions that the financial system performs. We consider each of the dimensions in turn.

Financial infrastructure comprises legal and accounting procedures, the organisation of trading and clearing facilities, and the regulatory structures that govern the relations among the users of the financial system. Financial infrastructure aids processing of information and allocating resources. Little theory exists relating financial market infrastructure to growth.

Country-specific studies can shed the light how by changes in the financial sector growth patterns have been changed.

### 9. Banking sectors in Estonia, Latvia and Lithuania

Existence of institutions enabling the functioning of a market economy is a fundamental precondition for growth. Institutions that relate to financial markets are of particular importance.

The restructuring of the financial system of the Baltic States, which was a bank-based system, began after the establishing of a two pillar banking system, i.e. by setting up central banks and privatising the state banks as well as giving the way to the establishing of new private banks.

sound and efficient banks core of and insurance companies important for the handling of is contributions and other payments, for the maintenance of individual records and accounts, for the provision of robust and efficient custodial services, and for the offer of reliable insurance contracts, especially with regard to term life.

The beginning of the transformation of the banking system in the Baltic States was a period of relatively low entry barriers due to two main reasons: the need to promote the growing share of the private sector in banking and the need to increase competition among banks. These changes include the establishment of many new institutions and privatisation of state-owned banks. The process of bank privatisation in Estonia was completed in 2000, in Lithuania - in 2002, whereas in Latvia it still goes on.

To summarise, we may note that at least three forces underlie the recent changes in the Baltic States banking industry: domestic deregulation and external opening-up of financial sectors, changes in corporate behaviour and banking crises.

## 9.1. Estonian banking structure

Estonian banks are the dominating financial intermediaries with total assets accounting for 70 per cent of GDP and reached EUR 4.3 billion. In the course of the banking sector restructuring, the number of credit institutions dropped from 42 banks in 1992 to 11 banks by end-1997 and further to only 6 banks after the Russian crisis in 1998 (Table 15). In 1999 a new bank received a license from Eesti Pank (Bank of Estonia), so that currently there are 7 banks in the market.

At the same time, consolidation has driven the asset concentration index of the three largest banks up to 91 per cent. Concentration was forced mainly by foreign capital inflows, strengthening of internal governance rules and the promotion of operational efficiency. Financial conglomerates of Swedish and Finnish origin hold 82 per cent of the banks' share capital. There are seven banks working in the country but the two biggest of them – Hansabank and Eesti Ühisbank – control about 80 per cent of the sector's total assets. Two Swedish banks control the biggest banks. Swedbank owns the majority stake in Hansabank and SEB owns the majority share in Eesti Ühisbank. The consolidated capital adequacy ratio of Estonian banking groups is a comfortable 14 per cent on the average, with no banks below the 10 per cent minimum.

Table 15 Estonian banks sector main characteristics

|                              | 1996  | 1997  | 1998   | 1999  | 2000  | 2001  |
|------------------------------|-------|-------|--------|-------|-------|-------|
| Number of commercial banks   | 13    | 11    | 6      | 7     | 7     | 7     |
| Number of private banks      | 12    | 11    | 5      | 6     | 7     | 7     |
| Number of state-owned banks  | 1     | 0     | 1      | 1     | 0     | 0     |
| Concentration C3, per cent   | 59    | 70    | 93     | 92    | 91    | 91    |
| Concentration C5, per cent   | 75    | 83    | 99     | 99    | 99    | 99    |
| Total assets, EUR million    | 1.467 | 2.594 | 2.620  | 3.008 | 3.695 | 4.372 |
| ROE, per cent                | 30.6  | 34.9  | -10.1  | 9.2   | 8.4   | 20.9  |
| ROA, per cent                | 2.9   | 3.3   | 3 -1.2 | 2 1.5 | 1.2   | 2.7   |
| Capital adequacy, per cent   | 12.4  | 13.6  | 17.0   | 16.1  | 13.2  | 14.4  |
| Total assets / GDP, per cent | 44    | 63    | 56     | 62    | 68    | 72    |
| Foreign ownership            |       |       |        |       |       |       |
| in share capital, per cent   | 33    | 44    | 61     | 62    | 84    | 85    |
| Major foreign ownership      |       |       |        |       |       |       |
| in total assets, per cent    | 3     | 2     | 90     | 90    | 97    | 98    |
|                              |       |       |        |       |       |       |

Source: Bank of Estonia

Bank credits are predominantly granted to domestic residents, whose share in total credits increased in the last five years. Asset structure changes since 1996 indicate an increasing share of loans granted to financial institutions, mostly internal group members (leasing subsidiaries). However, the largest share of assets is still attributable to claims on the non financial private sector, averaging 40 per cent of total assets and representing around 65 per cent of the total loan portfolio.

In terms of economic sectors, industry, real estate and trade receive about 40 per cent of bank loans, which reflects the strong development in these areas of business. The most pronounced decrease of lending to economic sectors was encountered in the agricultural sector.

In Estonia, loans to the public sector have always been small. There are basically two reasons for this. Firstly, when the Baltic countries regained their independence they did not have any public debt. Secondly, the public sector deficit has been under control in Estonia. Since 1994, the general government budget has been close to balanced, except for the year 1999. The government is even required by law to balance the state budget.

As a result of the stabilisation in the banking market and the overall economic development in Estonia, the average maturity of loans has lengthened since 1999. At the end 2001 short-term loans (12 months and less) comprise about 20 per cent of loans. Loans with a maturity of 10 years or more were 20 per cent of all loans.

Despite rapid growth, the loan portfolio of the Estonian banks shows good quality. The share of non-performing loans of total loans is currently less than 2 per cent. One reason for this is the recent economic growth, which has improved the quality of clients.

The banks' securities portfolio has followed a rather conservative pattern after the decline in the stock market in 1997. Foreign debt securities are the dominant segment in the securities portfolio of banks. However, growth of shares – strategic investments in associated and affiliated enterprises – has been significant since April 2001 due to the extension of the market share of Estonian banking groups in other Baltic countries (mainly in Lithuania). In contrast, the amount of shares held for trade or short-term investments has diminished remarkably over the last years, reaching a low 3% in 2001 (ECB, 2002).

During the booming years of 1995-1997, the quarterly return on capital (ROE) ranged between 10-20 per cent, but after the stock market crash in late 1997 profitability measures turned negative. Only from 1999 onwards did the banks' return to capital ratio turn positive again and ranges around 3 per cent on a quarterly basis. Economies of scale and advanced technologies exploited over recent years have played an important role in improving the banks' profitability outlook.

# 9.2. Latvian banking structure

The Latvian banking system has grown rapidly over the past years. Total bank assets grew by a factor of five since 1995 and reached EUR 6.2 billion (73 per cent of GDP) at the end of 2001. The number of credit institutions dropped from 61 banks in 1993 to 22 banks by end 2001 (Table 16).

Foreign investors play an important role in the Latvian banking system, but smaller than in Estonia and Lithuania. At the end of 2001, non-residents owned 68 per cent of Latvian banks'

capital. These investors are mainly from Estonia (17.7 per cent), Sweden (16.2 per cent), Germany (15.0 per cent), Isle of Man (6.8 per cent) and USA (3 per cent). Ten domestic banks are now majority foreign owned and among them there are five foreign subsidiaries doing business in the country.

Following from the high number of banks, the Latvian banking sector is not as concentrated as in Estonia or in Lithuania and there are many active banks in the market. The three biggest banks – Parex Bank, Unibank and Hansabank – control a little more than half of all commercial bank assets.

Latvia is the only Baltic country where the banking sector is not yet completely privatised. The Latvian state owns completely *Hipoteku un zemes banka* (Mortgage and Land Bank) and holds a 32 per cent stake in *Krajbanka* (Latvian Savings Bank), which is the fifth largest bank in Latvia. These holdings together account for 4.5 per cent of the total share capital of Latvian banks. The government is planning to sell its stake in Savings Bank but the privatisation is not expected to happen soon, as the bank is the most important holder of the privatisation voucher accounts in Latvia and they will be used for remaining privatisation.

Table 16
Latvian banks sector main characteristics

|                                  | 1996  | 1997 | 1998  | 1999 | 2000 | 2001 | _   |
|----------------------------------|-------|------|-------|------|------|------|-----|
| Number of commercial banks       |       | 32   |       | 31   |      |      | 27  |
| 23 21                            | 22    |      |       |      |      |      |     |
| Number of foreign banks branches |       | 1    |       | 1    |      |      | 1   |
| 1 1                              | 1     |      |       |      |      |      |     |
| Concentration C3, per cent       | n.a.  | n.a. | n.a.  | n.a. | n.a. | 51   |     |
| Concentration C5, per cent       | n.a.  | n.a. | n.a.  | n.a. | n.a. | 60   |     |
| Total assets, EUR million        | 1,722 | )    | 2,560 | 2    | ,590 | 3,   | 018 |
| 4,500 6,200                      |       |      |       |      |      |      |     |
| ROE, per cent                    | 24    | 26   |       | 11   | 18.6 | 19   |     |
| ROA, per cent                    | 3     | 3    | • • • | 1    | 1.6  | 1.5  |     |
| Capital adequacy (10), per cent  |       |      |       |      |      | 14.2 |     |
| Total assets / GDP, per cent     |       | 40   |       | 52   |      |      | 47  |
| 50 62                            | 73    |      |       |      |      |      |     |
| Non-performing loans to:         |       |      |       |      |      |      |     |
| Total loans                      | 20    | 10   | 7     | 6    | 4.6  | 2.8  |     |
| Foreign ownership                |       |      |       |      |      |      |     |
| in share capital, per cent       | n.a.  | n.a. | n.a.  | n.a. | n.a. | 68   |     |
| Major foreign ownership          |       |      |       |      |      |      |     |
| in total assets, per cent        | n.a.  | n.a. | n.a.  | n.a. | n.a. | 62   |     |

Source: Financial and Capital Market Commission, Bank of Latvia

The ratio of credits of domestic enterprises and households to GDP was 8.7 per cent in 1995 and 28.2 per cent at the end of 2001.

Commercial credits and industrial credits account for the largest share of domestic credits, at 37 per cent and 27 per cent, respectively, followed by mortgage lending (17 per cent). Consumer credit and credit card credits still have a small share of only around 5 per cent.

In terms of sectors, 23 per cent of all credits in the domestic economy went to the trade sector, 18 per cent to manufacturing enterprises, 10 per cent to transport, storage and communications companies. There is a clear shrinking trend with regard to the trade sector,

whose credit share decreased considerably since the beginning of the nineties. Many companies have actively searched foreign ownership in order to acquire sufficient financing as foreign partners also offer technologies, know-how and access to cheaper funds.

In Latvia, loans to the public sector have reached 5 per cent of the total loan portfolio.

As a result, the share of long-term loans has increased from 73 per cent at the end of 2000 to 74 per cent at the end of 2001. This serves as an indicator of successful developments in mortgage lending, as such lending doubled from end 2000 to end 2001.

Given the high capital adequacy and fact that the formerly sizeable non-performing loans have decreased to just 4.4 per cent of assets and are well provisioned, however, the strong credit growth does not seem to pose systemic risks to the banking system. At the end of 2001 Latvian banks kept capital at the level of 14.2 per cent of risk weighted assets, well above the 10 per cent threshold stated in regulations.

In last five years, the Latvian banking sector operated with profits, except for 1998 when banks' business was influenced negatively by the Russian financial crises.

# 9.3. Lithuanian banking structure

Banks are the most important intermediates of financing in Lithuania. Privatisation in banking sector was completed at the beginning of 2002, when Lithuania sold its last state-owned bank, Agricultural Bank, to a German bank. The Lithuanian banking sector is still smallest in the Baltic States. In 2001 bank assets constitute 32 per cent of GDP and reached EUR 4.35 billion. Banks assets comprise nearly two-thirds of those of overall financial system.

Initially the number of banks soared up to 27 in 1993, followed by a major shake-up of the banking system in 1995, which was caused by imprudent and sometimes fraudulent management activities, as well as the lack of regulation and relevant skills. As a result, the number of banks shrank to 13 in 1996. Foreign banks started opening their branches in 1997 and there are 4 branches at the moment (one from Poland, one from Finland and two from Germany). At the end 2001 there are nine deposit banks and four branches of foreign banks operating in Lithuania.

As in Estonia the banking sector in Lithuania is highly concentrated – the three largest banks control 79 per cent of the market. The sector is very much concentrated and the two biggest banks – Vilniaus Bank and Hansabank – control almost 70 per cent of the assets of the whole sector (Table 17). Foreign ownership in the Lithuanian banking sector is very large. Swedish SEB owns Vilniaus Bank (the biggest bank in Lithuania) and Estonia's Hansabank, in which Swedbank holds a majority stake, bought Lithuanian Savings Bank (the second biggest bank) in 2001. In July 2002 the share of foreign capital in Lithuanian banks is estimated to be 89 per cent and foreign banks have the majority power in seven banks.

Table 17 Lithuanian banks sector main characteristics

|           |     |              |      | 1996  | 1997   | 1998 | 1999 | 2000 | 2001 |    |
|-----------|-----|--------------|------|-------|--------|------|------|------|------|----|
| Number of | com | mercial bank | S    | 9     | 14     |      | 1    | 3    |      | 12 |
|           | of  | foreign<br>3 | bank | s bra | anches |      | 4    |      |      | 1  |

V.Katkus, R.Lazutka. The Establishment of the Pension Funds System in the Baltic States.

| Concentration C3, per cent           |       | 47   |      |      | 52   |      | 63    |
|--------------------------------------|-------|------|------|------|------|------|-------|
| 63 75                                | 79    |      |      |      |      |      |       |
| Concentration C5, per cent           |       | 61   |      |      | 71   |      | 80    |
| 79 82                                | 89    |      |      |      |      |      |       |
| Total assets, EUR million            | 1,470 |      | 2,1  | 90   | 2,64 | 0 :  | 3,000 |
| 3,810 4,350                          |       |      |      |      |      |      |       |
| ROE, per cent                        |       |      |      |      |      |      | _     |
| -15.8 10.8 1                         | .1    |      | 4.0  |      | n.a. |      |       |
| ROA, per cent                        | -     | -1.0 | 1.0  | 0.1  | 0.4  | n.a. |       |
| Capital adequacy ratio (10 per cent) | 10.5  | 15.3 | 23.8 | 17.4 | 16.3 | 15.6 |       |
| Liquidity ratio (30 per cent)        | 55.7  | 65.5 | 58.7 | 45.4 | 49.7 | 48.0 |       |
| Total assets / GDP, per cent         |       | 11   |      |      | 11   |      | 12    |
| 14 13                                | 15    |      |      |      |      |      |       |
| Foreign ownership                    |       |      |      |      |      |      |       |
| in share capital, per cent           |       | 25   |      |      | 33   |      | 38    |
| 35 58                                | 81    |      |      |      |      |      |       |
| Non-performing loans to:             |       |      |      |      |      |      |       |
| Total loans                          | 32    | 28   | 13   | 12   | 11   | 7    |       |
| Provisions to:                       |       |      |      |      |      |      |       |
| Total loans                          | 20.7  | 18.5 | 5.9  | 4.5  | 3.7  | 2.6  |       |

Source: Bank of Lithuania

Bank credit to the private sector has remained at a rather low level and constituted 13.1 per cent of GDP in 2001, while funds were mostly redirected to the public sector and foreign assets during the last few years. The slowdown might be explained by cautious lending behavior following the banking (1995) and the Russian crisis (1998) as well as a general scarcity of lending opportunities.

At the end of 2001, the loans to enterprises accounted for 78 per cent (individuals 11 per cent) of the total bank loan portfolio. Loans to the manufacturing, trade, energy and transportation sectors account for 23 per cent, 22 per cent, 7 per cent and 6 per cent respectively (at the end of 2001) and dominate the loan portfolio of commercial banks. Leasing companies are becoming an important lending channel for banks, as the share of loans to non-bank financial institutions, mostly to subsidiary leasing companies, has been expanding quite rapidly and amounted to 10 per cent at the end of 2001. The breakdown of the credit portfolio by sector corresponds roughly with the structure of GDP, although loans to transportation, construction and agriculture are slightly underweight.

The average capital adequacy ratio in the Lithuanian banking system was 15.4 per cent at the end of June 2002 and exceeded the minimum requirement set by the Bank of Lithuania. Recently the Bank of Lithuania started a long-term strategy of lowering the minimum reserve requirement by reducing the requirement ratio from 10 per cent to 8 per cent in October 2000 and to 6 per cent in March 2001 (2 per cent in the euro area). The high level of reserve requirements in Lithuania is mainly the result of liquidity concerns, while initially it also served as a tool for curbing credit growth and inflation. However, the improving expertise of individual banks as Lithuania well as the strengthening supervisory capacity of the Bank of Lithuania diminish liquidity concerns and should allow further reductions towards the euro area level. This process will facilitate to increase bank's lending capacity.

Also the liquidity ratio (45 per cent) was considerably higher than the minimum requirement of 30 per cent. The main conclusion of the FSAP report of the IMF, which was finalised at the end of 2001, was that there were no major immediate risks to the stability of

the Lithuanian financial system. The high capital adequacy ratio and low ratio of credit to GDP reflects insufficient financing for small- and medium-sized enterprises and as such trend can be harmful to economic development.

Banks are well capitalised and comply with all prudential requirements. However, traditional profitability ratios (ROE, ROA) indicate insufficient profitability, which cannot be explained only by the credit risk issues. Other factors include: a low share of non-interest income (in 2000, non-interest income accounted for only 42 per cent of net banking income and less than 30 per cent of gross income), which makes banks vulnerable to interest rate competition; a high portion of non-interest bearing assets (reserves and tangible assets); and high general operating expenses, making up 79 per cent of net banking income in 2000 (ECB, 2002).

## 9.4. Banking crises and restructuring costs

In addition to the legal system and political factors Allen and Gale (2000a) have argued that financial crises have had a significant impact on the historical development of financial systems and their shape. The Baltic States provide a soft illustration of an emerging economy affected by this type of problem. Most systematic banking crises in 1992-1995 these economies were caused by poor lending.

In the early 1990s, when prices of metals and other commodities in Russia were largely below world prices, Latvian and Lithuanian banks were extensively involved in the profitable activity of trade financing between East and West. Later this activity increased for banks the bad loans portfolios. Another reason of the deterioration of bank loan portfolio was sharp decrease in inflation ratio in 1992-1994. This process increase real interest burden on the companies cash flows and later some companies go bankrupts or were restructured.

In all Baltic countries of the early 1990s supervisory systems were inadequate and prudential regulations were missing. Deficiencies in supervision and in the legal framework help to deteriorate the quality of banks' portfolios.

Banking crises in Estonia (1992-1994), Latvia (1995) and Lithuania (1995-1996) have not been particularly severe. In Baltic States the authorities differentiated approach according to the source of problems and the size of the troubled banks. Some banks were liquidated, while others were re-capitalised. Estonia liquidated banks, which got into trouble because of management problems, while those ones, suffered external shocks, which were merged and recapitalised. Lithuania liquidated private banks and restructured and re-capitalised state banks. Latvia widely liquidated problem banks.

These measures apparently softened rigid currency pegs. This explains why banking crisis have not been accompanied by an excessive financial sector instability. The banks were small, therefore the restructuring costs were low despite of the high percentage of bad loans in the overall loan portfolio. In 1991-1999, the costs to the Baltic States governments for banks restructuring was from 1.7 percent (Estonia) to 3,1 percent (Lithuania) of GDP, whereas the banking crisis of the USA in 1984-1991 cost the government 5-7 per cent of GDP, and for the Check Republic (1991-1998) it comprised even 25 percent of GDP (Table 18).

The much higher fiscal costs incurred by the Central European countries than the Baltic States can be explained by three factors. First, the different restructuring strategies followed by the two country groups entailed different fiscal costs. The CEE authorities pursued intensive restructuring and recapitalisation of banks involving injection of new capital, and incurred large costs as a result. On the other hand, the Baltic governments rarely restructured or injected new capital into banks, and incurred lower fiscal costs as a result. Second, there was more loss-sharing with depositors and bank shareholders in the Baltic's than in the CEEs. Third, the restructuring operations undertaken by the CEEs suffered from several weaknesses, which raised fiscal.

These fiscal expenditures did not always appear in the central government budget, and did not necessarily contribute to the government deficit; nonetheless, they represent a cost to the public sector. The fiscal costs raised the governmental debt burdens. From the table ... we can see that the cost to the Estonian, the Latvian and the Lithuanian governments of the restructuring of the banks was the lowest in the Eastern and Central Europe.

Table 18
The crises of the banks

| Country bad loans/              | The costs    | Year of restructuring | The highest level of All loans, |
|---------------------------------|--------------|-----------------------|---------------------------------|
| per cent . per cent, (1         | 991-1998 m.) | banking system/GDP    |                                 |
| Estonia<br>1.9<br>Latvia<br>2.7 |              | 1992-1994<br>1995     | 20                              |

V.Katkus, R.Lazutka. The Establishment of the Pension Funds System in the Baltic States.

| Lithuania<br>3.1  | 1995-1996 | 32   |
|---|-----------|------|
| Bulgaria<br>41.6<br>Czech<br>25.4<br>Hungary<br>12.9<br>Poland<br>7.4 |           | Rep. |
| USA<br>5-7  | 1984-1991 | 4    |
| Norway<br>4   | 1988-1992 | 9    |
| Finland<br>8-10   | 1991-1993 | 9    |
| Sweden<br>4-5   | 1991-1993 | 11   |

Source: Tang and others.

banking fiscal cost of restructuring for the government was not very large in **Estonia** (around 1.4 percent of GDP for the period 1991-98) because the government decided to bail out only two banks that faced solvency problems after they had lost access to part of their assets, held in Moscow. The other banks were liquidated. The cost incurred by the government in connection with banking sector problems includes a transfer to the central bank, extended in 1996, that enabled the monetary institution to cover the loss suffered in 1994, partly as a result of banking sector crises.

In **Latvia**, treasury bills were issued in 1993 and 1994 in conjunction with the restructuring of two state-owned banks. Nevertheless, when a full fledged crisis erupted in 1995 after the publication of the banks' audited reports for 1994, the government did not intervene to recapitalise troubled banks and several banks, including the largest private banks, were liquidated. а result, the fiscal costs οf As restructuring for the Latvian government were also not very high (around 2.5 percent of GDP for the period 1991-98).

In **Lithuania**, the banking sector was highly concentrated, leading the government to intervene in support of the banks that were considered "too big to fail", while smaller private ones were closed.

Capital injection by the government was directed mainly to two state banks and one private bank that together accounted for nearly 50 percent of deposits and 50 percent of banking sector assets. Altogether, the cost to the Lithuanian government for

bank restructuring was around 1.7 percent of GDP (Tang and others).

After banking crises Baltic's central banks took measures to stabilise banking sector, for examples, they introduced International Accounting Standards (IAS) for the financial reports of commercial banks and BIS standards for the capital adequacy ratio (Table 19).

Table 19 Stabilisation of Banking Sector

|                      | Bank | crisis I         | AS implemented | RIS   |
|----------------------|------|------------------|----------------|-------|
| Establishment<br>C/A |      | of privatisation | -              | Banks |
| banks account        | S    |                  |                |       |
| supervision          |      |                  |                |       |
| Estonia              | 1998 | 1992-1993        | 2000           | 1995  |
| 1994                 | 1990 | 1994             | 2000           |       |
| Latvia               | 1000 | 1995             |                | 1995  |
| 1994                 | 1999 |                  |                |       |
| Lithuania<br>1996    | 1997 | 1995-1996        | 2002           | 1996  |
|                      |      |                  |                |       |

Source: Bank of Estonia; Bank of Latvia; Bank of Lithuania.

One of the most important consequences of the banking crises in the transition economies has been changes in the structure of bank ownership. Fears of bank runs and a vicious circle of credit contraction in Baltic States push governments to encourage bank mergers and foreign take-over. A consolidation trend has gradually begun to take hold in the region, from 1997.

Foreign banks lead to higher concentration in banking sector in Estonia where the three largest banks have 91 percent and in Lithuania - 79 percent of total assets of the whole banking sector. The consolidation within the Latvian banking system is still going on and now assets of the three largest banks account for 52 percent of total assets of the whole banking sector.

Foreign capital penetration ratio in banking sector measured as major foreign ownership in total assets is the highest in Estonia (98 percent) followed by Lithuania (86 percent). Financial conglomerates of Swedish and Finnish origins hold majority of the banks' share capital in Baltic

States. In the euro area countries, in contrast, foreign ownership is highly limited. Only about 20 per cent of the banks' capital in euro area countries is in foreign ownership, and only in four countries is this ratio at least 30 per cent (ECB 2002).

The Baltic States region remains under-banked in terms of banking assets and deposits. In Latvia and in Estonia, the relation of banking assets to the economies' GDP amounts to about 73 percent and 70 percent. Lithuania is at the other end of the spectrum with its banking assets of only around 32 percent of GDP, whereas, in the euro area, bank assets amount to about 265 per cent of GDP.

The banks in the Baltic States are universal banks. They are financial institutions that are allowed to offer a wide range of financial products and services to a vast number of customers. They not only take deposits and make loans, but they may also sell and underwrite securities and insurance and may own equity interests in firms, including non-financial firms. In Estonia and Lithuania the trend toward consolidation of a bank with non-bank financial activities is slowly but surely takes ground. This lead to a situation where banks own leasing companies, insurance companies and pension funds. In Baltic region, especially in Estonia and Lithuania, universal act as catalyst for the emergence of financial conglomerates. The so-called "triangle of finance" is most Estonia, advanced in where largest banks own companies, insurance companies and pension funds. financial structure very close to some Latin America countries financial conglomerates (Mexico, Brazil).

Universal banks may be less affected when companies bypass banks and raise funds directly in the capital markets or financing from other financial institutions, because the decline in their direct lending activities may be offset by an increase in their leasing and securities activities. Similarly, the direct sale of pension funds and life insurance policies may compensate for the drain of deposits that also characterise the bank disintermediation process.

The banks in the Baltic States have become the main organisers of the financial sector. One can claim that a speeded-up restructuring of the banking sector contributed to the establishment of a more efficient banking system.

# 9.5. Trends in the Baltic's banking industries developments

Over last five years, when economic development has been rapid, the banking sectors have grown swiftly. The growth has been speeded up by large structural reforms that started after the chain of the banking crises in the 1992-1995. These reforms decreased the number of banks in the Baltic's countries, ended the privatization in the sector and most of the banks were transmitted into the hands of foreign banks. The Estonian, Latvian and Lithuanian banking markets are controlled by Scandinavian financial conglomerates. The three largest financial groups – Swedbank, SEB and Nordea – have more than 60 per cent of the whole Baltic's banking market (Table 20).

The concentration (more then 80 per cent) in the Estonia and Lithuania banking sector is very high by any standards. This ratio is the highest in the region, for example, at the end 2000 the market concentration (market share of the three largest banks) of the banking sector in Poland was 43.5 per cent, in Hungary -51.5 per cent and in Czech Republic -69.7 per cent.

Table 20 Three biggest banks in each Baltic country

| Country<br>Country         | Asse                           |               | Group   |        |          |
|----------------------------|--------------------------------|---------------|---------|--------|----------|
| (March 200                 | 2)                             |               |         |        |          |
| Estonia                    | Hansabank Swedbank Sweden 2709 |               |         |        |          |
|                            | E                              | esti Ühisbank | SEB     | Sweden | 1184     |
| 363                        |                                |               | Nordea  |        |          |
| Latvia                     | Pa                             | Latvia        | 1318    |        |          |
|                            | Unibank                        | SEB           | Sweden  | 1186   |          |
|                            | Hansabank                      | Swedbank      | Sweden  | 1028   |          |
| <b>Lithuania</b><br>Sweden |                                | Vilniaus Ban  | kas     |        | SEB      |
| Sweden                     | Hansa-LTB                      |               |         |        | Swedbank |
| '                          | Agriculture Bank               | Nord LB       | Germany | 536    |          |

11,176

Source: Bank of Estonia; Bank of Latvia; Bank of Lithuania.

Difference when compared to Estonia and Lithuania is that the share of foreign depositors in Latvian banks. For many Latvian banks, receiving deposits from the CIS and reinvesting them in Western Europe is an important business activity. In small banks, which are specialized in these non-resident transactions, the non-resident deposits can amount to as much as 90 per cent of the total deposits of the bank. Although banks have announced that most of the investments in Western Europe are in liquid form and with small maturity mismatch, there is a risk that some occasions can lead to a large deposit outflow from Latvia and this could be harmful at least for some Latvian banks. Lithuanian banks have smallest share

of foreign liabilities. They (banks) are based on the domestic savings.

Only half of Latvian banks assets are related to domestic economy. One fifth of the Estonian's and Lithuanian's banks assets are invested in foreign markets.

Table 21
The Baltic's banks foreign assets and liabilities at the end
2001

|           |            |              |            | l     |         |            |       |
|-----------|------------|--------------|------------|-------|---------|------------|-------|
|           |            |              |            |       |         |            |       |
| Estonia   | Latvia     | Lithua       | ania       |       |         |            |       |
|           |            |              |            |       |         |            |       |
| Banks'    | as         | sets         | ( %        |       | of      |            | GDP)  |
| 70        | 77         |              | 32         |       |         |            |       |
| Banks'    | foreign    | assets       | ( %        | of    | tota    | al as      | sets) |
| 23.01     | 47.4       | -            | 19.71      |       |         |            |       |
| Banks'    | foreign    | liabilitie   | s (%       | of    | total   | liabili    | ties) |
| 31.81     | 58.5       | -            | 15.71      | !     |         |            |       |
| Long-term | real inter | rest rates o | on credits | in na | ational | currencies | S     |
| in        | Γ          | ecember      |            | 20    | 01      |            | (왕)   |
| 5.94      | 6.60       | (            | 5.06       |       |         |            |       |
|           |            |              |            |       |         |            |       |

Source: Bank of Estonia; Bank of Latvia; Bank of Lithuania.

The ratio of credit to the private sector to GDP and the ratio of M2 of GDP are used as indicators of the degree of financial depth. These variables are expected to increase when banking sector is effectively restructured. An increase of credit to the private sector, however, may also reflect bad lending practice. Therefore, the share of non-performing loans is included as an additional indicator of banking sector performance.

Table 22 Credit to the private sector to GDP, per cent

| Country<br>1997           | 1998             | 19<br>1999  | 92<br>2000       | 1993<br>2001 | 1994             | 1995                 | 1996         |
|---------------------------|------------------|-------------|------------------|--------------|------------------|----------------------|--------------|
| Estonia<br>19,2<br>Latvia | 26,4             | 25,2        | 7,6<br>25,9      | 11<br>25     | -                | 13,4<br>n.a.         | 14,7<br>15,9 |
| 7,4<br>Lithuan<br>9,4     | 6,8<br>ia<br>9,3 | 10,5<br>9,6 | 15,5<br>-<br>11, | 13           | ,0<br>3,8<br>0,1 | 19,6<br>17,6<br>11,7 | n.a.<br>12,6 |

Source: EBRD Transition report 2001, P 140, P 168, P 172. Bank of Estonia; Bank of Latvia; Bank of Lithuania.

In Estonia credits to the private sector grow permanently starting from 1992. Even banking crises in 1992 and 1994 did

not stop this process. Only Russian financial crises slightly decrease lending volumes to the private sector. This Estonian banking industry's attitude toward private companies helps to keep the real sector on the growth path.

The picture is quiet different in Latvia and Lithuania. The banking crises in both countries hit hard banks lending practices. Latvia reached pre-crises (1994) level in 1998 and Lithuania only in 2002. This has impact on private companies' development. Opposite to Estonian situation the banks in Latvia and in Lithuania were really untouched by Russian financial crises in 1998 (Table 22).

The ratio of non-performing loans to total loans decreased and now is at a comfortable level.

The ratio of M2 and GDP is used as another indicator of the degree of financial depth. This ratio follows the same trend as the ratio of credit to the private sector to GDP. Just Russian financial crises in 1998 sharply reduced M2 in Estonia (Table 23). This reflects reduction in banks trading in the securities market.

Table 23 M2/GDP (per cent)

|                 | 1          |      |            | •            | - ,          |      |      |
|-----------------|------------|------|------------|--------------|--------------|------|------|
| 1997            | 1998       | 1999 | 2000       | 1993<br>2001 | 1994         | 1995 | 1996 |
| Estonia         |            |      | 32         | -            | 33,5         | 32,9 | 34,6 |
| 40,6<br>Latvia  | 35,4       | 42,1 | 48,<br>31  | 0<br>L,5     | 52,1<br>33,4 | 22,3 | 22,2 |
| 26,6<br>Lithuan | 25,7<br>ia | 25,6 | 29,<br>23, |              | 32,3<br>25,8 | 23,3 | 17,2 |
| 19,0            | 19,4       | 21,0 | 23,        | 1            | 26,5         |      |      |

Source: EBRD Transition report update 2002, P 55, P 69, P 71.

The Estonian and Latvian banks' return on equities and assets are higher. Some commentators have expressed concern about the adverse impact on stability of the pressure to boost (short-run) shareholder value. In this respect, a rate of return on equity of around 15-20 per cent appears to be expected. Given an 8 per cent capital ratio, this norm would translate into a 1-2 per cent return on assets. This expectation may not fully reflect the transition to a world of lower inflation, and may be based on growth assumptions that are not likely to be sustainable. It also seems relatively ambitious compared with risk-free returns. To the extent that foreign shareholder expectations of returns are too demanding, the emphasis on shareholder value could thus push banks into riskier areas in the future. Alternatively, the shift to feebased services could continue, and banks could become more

involved as asset gatherers and active intermediaries in the capital markets.

The series of reforms have stabilized the Baltic's market and general trust in the stability of the banking system has increased among the citizens later. More than 90 per cent of the Baltic's savers keep their wealth in bank deposits.

## 10. Non-banking financial intermediaries

Disintermediation processes start slowly in the Baltic countries. Outside banks the leasing and factoring companies are the fastest growing financial intermediates. At the end 2001 total leasing and factoring portfolio reached EUR 2 billions. Half of this comprised the Estonian assets. Because the three biggest leasing companies are owned by banks, this market has the same higher concentration as banking market.

Total investment funds assets in the Baltic's account only EUR 200 million. The investment funds industry in Estonia is biggest and as country has the highest investment funds culture in the Baltic States. This financial knowledge facilitates the establishment of the pension funds system.

Credit unions play a minor role in financial intermediations. They are mainly developing in Latvia and Lithuania. In the future credit unions can play a crucial role in providing finance for they members in rural areas.

Estonia. The *investment funds* began to develop earliest in the Baltic's in 1996. Domestic money market and capital growth funds became most popular. However, after the decline in stock prices during the Russian financial crises in 1998, investment funds assets shrank (from 2.36 per cent to 0.5 per cent of GDP), and the historically high share of investment funds invested into stock market diminished and has remained at a modest level since. In 1999, investment funds assets demonstrated some revival. During last year, investment funds have experienced a rapid growth, partly because money market and interest funds attracted companies' attention as an alternative short-term investment facility for bank deposits (Table 24). In 2001, the economic growth boosted the volume of the funds rapidly and at the end of the year, the volume of investment funds was EUR 190 million. The pension reform is also expected to accelerate the development of investment funds industry.

Table 24 Selected indicators of the Estonian investment funds

| 1996 | 1997                                   | 1998   | 1999  | 2000  | 2001*  |
|------|--|--|---|---|--|
| 31   | 97                                     | 23   | 76  | 98  | 148  |
| 22   | 45                                     | 79   | 79  | 75  | 72   |
| 1    | 0                                      | 5  | 14  | 17  | 21   |
| 78   | 55                                     | 16   | 7   | 7   | 7  |
| -    | -                                      | -  | 0   | 1   | 1  |
| 0.92 | 2.36                                   | 0.50   | 1.50  | 1.73  | 2.48   |
| 12   | 23                                     | 13   | 14  | 16  | 17   |
| 6    | 10                                     | 7  | 5   | 6   | 6  |
|      | 31<br>22<br>1<br>78<br>-<br>0.92<br>12 | 31 97<br>22 45<br>1 0<br>78 55<br><br>0.92 2.36<br>12 23 | 31 97 23<br>22 45 79<br>1 0 5<br>78 55 16<br> | 31 97 23 76<br>22 45 79 79<br>1 0 5 14<br>78 55 16 7<br>0<br>0.92 2.36 0.50 1.50<br>12 23 13 14 | 31     97     23     76     98       22     45     79     79     75       1     0     5     14     17       78     55     16     7     7       -     -     0     1       0.92     2.36     0.50     1.50     1.73       12     23     13     14     16 |

\*June 2001;

Source: Bank of Estonia.

Leasing. Since its establishment in 1993, the leasing market has developed rapidly and has become an important funding alternative to bank loans both for enterprises and private individuals. Because the majority of leasing companies are owned by banks (four from the five companies), the main source for financing of leasing companies is credit by parent-banks, but they are also able to raise funds from international capital markets with the guarantee of the parent bank. Banks encourage leasing financing over ordinary bank loans mainly because of collateral ownership reasons. According to leasing contracts, collateral will remain the property of the leasing company, which makes the seizure of the collateral, if necessary, easier than in case of bank loans.

In 2001, leasing assets constitute 15 per cent of GDP. The total volume of the leasing portfolio had increased to EUR 950 million by the end of July 2002. The structure of leased goods is relatively concentrated, being dominated by real estate (22 per cent), individual cars (27 per cent), commercial vehicles (20 per cent) and investment goods (20 per cent).

The main vulnerability of the leasing market is that difficulties in this sector can have an adverse impact on parent banks. Such an event can be triggered by the economic downturn and can lead to a significant raise in default rates on leasing contracts, considering the high concentration of contracts into specific sectors.

**Latvia.** Assets in *investment funds* started to grow rapidly from the beginning of 2001. By the end of March 2002, the assets of investment funds had grown to EUR 18 million.

Leasing. The leasing market is growing very fast in Latvia. The leader in the market, with 42 per cent of the market share, is Hansa Leasing, a subsidiary of the Hansa Group. In 2001, the leasing market grew 62 per cent and amounted to EUR 500 million. Often leasing financing is channeled for purchases of cars and real estate.

*Credit Unions*. There are 22 credit unions operating in Latvia. At the end of March, their assets amounted to EUR 3 million. The main type of credit union activity is providing short-term and medium term loans to their members, mainly for the purchase of consumer goods. The share of loans issued to members comprised almost 80 per cent of assets. The credit portfolio has grown rapidly (48 per cent in 2001).

**Lithuania.** *Investment funds* industry is in embryonic stage. The legal background for investment and pension funds was established few years ago, but due to not favorable taxation environment here was established only one index fund with EUR 1 million in assets.

Leasing. In 2001 leasing and factoring companies' portfolio reached 3 per cent of GDP. There are nine leasing companies in Lithuania. With small exceptions they are all banks' subsidiaries. Three leasing companies comprise 85 per cent of the total leasing portfolio in Lithuania. The aggregate portfolio of the companies amounted to EUR 380 million at the end of June 2002. The sector is growing fast and the portfolio was 65 per cent bigger than a year ago. The major leasing objects by rank are transport vehicles, real estate and capital goods.

*Credit Unions*. There are 47 credit unions in Lithuania. The unions are all very small. The sector is growing and new unions are being founded. The assets of the unions more than doubled in a year and amounted to EUR 14 million at the end of June 2002.

## 11. Insurance Markets in the Baltic States

In most reforming countries in Central and Eastern Europe, including Baltic States, insurance companies in the line with banks play a leading part in the private pillar of the new multi-pillar pension systems. Some light should be shed on the subject from the pension funds and pension systems reform perspective. We will concentrate our attention mainly on life insurance market.

First private insurance companies appeared in the Baltic countries in 1991 and in 1992. Private insurance businesses developed quickly.

For the regulation of insurance activities relevant laws were passed in Lithuania in 1990, in Estonia in 1992 and in Latvia in 1993. Originally, insurance business was supervised by Ministries of Finance. A permanent insurance supervision authority was set up in Estonia in 1993, in Latvia and Lithuania — in 1995.

Privatization of the state companies that had taken over the liabilities from Gosstrah was one of the most important problems. In 1995 -1997 this process was completed successfully in all the Baltic countries.

In mid-90s, the Baltic countries were to improve insurance legislation and supervision. New insurance laws were passed in Lithuania in 1996 and in Latvia - in 1998. Life insurance was separated from non-life insurance in Estonia in 1992, in Latvia - in 1994 and in Lithuania - in 1996. The solvency control as applied in the EU was introduced. Now insurance accounting complies with EU requirements in Estonia, Latvia and Lithuania.

The insurance markets in the Baltic States have been established within a very short period of time - only 12 years. Market activities are regulated by legislation that complies with EU requirements and professional supervision authorities have been set up.

### 11.1. The structure of the Baltic's insurance market

There are 21 life insurance companies and 45 non-life insurance companies operating in the Baltic countries. In 2001, the total written premium for life insurance amounted to EUR 50.7 million and for non-life insurance to EUR 363.0 million.

The structure of the scattered insurance market in Estonia and Latvia has been concentrated in recent years. At the end of 2001, there remained 21 insurance companies working in Latvia and 6 of them are life insurance. Non-resident investors own 52 percent of the paid share capital in the insurance companies. Although the insurance market in Latvia is larger than the one in Lithuania and Estonia, but all

together are still very much undeveloped when compared to EU countries. Gross collected premiums amounted to EUR 174.1 million in 2001.

The Lithuanian insurance market is the second biggest in the Baltics. Gross collected premiums amounted to EUR 125.4 million at the end of 2001. The life insurance in Lithuania is the strongest and comprised half of the whole Baltic's life insurance market.

Foreign-owned companies control over 80 per cent of the market. Gross collected premiums amounted to  $EUR\,114.2$  million at the end of 2001.

In summary, a breakdown of premium income by insurance type shows the clear dominance of the non-life sector over life. It is also apparent from the available data that the life sector in the Baltic countries is underdeveloped, although it does show signs of growth.

Table 25
Number of Insurance Companies in the Baltic Country

| Coun<br>1996 | try<br>1997 | 1998     | 1999 2     | 000 2001    |    |      |      |
|--------------|-------------|----------|------------|-------------|----|------|------|
| Esto         | nia         |          |            |             |    |      |      |
| -            |             | insuran  | lce compar | nies        |    | n.a. |      |
|              | n.a.        | n.a.     | 11         | 8           | 8  |      |      |
| _            | life-ins    | urance c | companies  |             |    | 7    |      |
|              | 8           | 9        | 6          | 6           | 6  |      |      |
| -            | total num   | mber of  | insurance  | companies   |    | n.a. | n.a. |
|              | n.a.        | 17       | 14         | 14          |    |      |      |
|              |             |          |            |             |    |      |      |
| Latv         | ia          |          |            |             |    |      |      |
| -            | non-life    | insurar  | rce compai | nies        |    |      | n.a. |
|              | 20          | 21       | 19         | 17          | 15 |      |      |
| -            | life-ins    | urance c | companies  |             |    | 9    |      |
|              | 8           | 8        | 8          | 8           | 6  |      |      |
| -            | total nu    | umber of | insuran    | ce compani  | es |      | n.a. |
|              | 28          | 29       | 27         | 25          | 21 |      |      |
|              |             |          |            |             |    |      |      |
| Lith         | uania       |          |            |             |    |      |      |
| -            | non-life    | insurar  | ice compa  |             |    |      | n.a. |
|              | n.a.        | n.a.     | 27         | 22          | 22 |      |      |
| -            |             |          | companies  |             |    |      | 4    |
|              | 4           | 4        | 5 '        | 5           | 9  |      |      |
| -            | total nu    | mber of  |            | ce companie |    |      | n.a. |
|              | n.a.        | n.a.     | 32         | 27          | 31 |      |      |

Baltic states

| - | non-li | non-life insurance companies |       |         |        |     |    |    | n.a. |
|---|--------|------------------------------|-------|---------|--------|-----|----|----|------|
|   | n.a.   | n.a.                         | 5     | 7       | 47     | 45  |    |    |      |
| - | life-i | life-insurance companies     |       |         |        |     |    |    |      |
|   |        | 2                            | 20    | 21      | 19     |     | 19 | 21 |      |
| - | total  | number                       | of in | surance | compan | ies |    | 1  | ı.a. |
|   | n.a.   | n.a.                         | 76    |         | 66     | 66  |    |    |      |

Source: Estonian Insurance Supervisory Authority; Financial and Capital Market Commission (Latvia); State Insurance Supervisory Authority (Lithuania).

In 2002, the Lithuanian insurance market was the fastest growing market in Baltic's due to introduction The Law on Motor Third Party Liability Compulsory Insurance of Vehicle Owners and Possessors.

In the first half of 2002, in Lithuania written insurance premium amounted to LTL 125.2 per capita; the share of LTL 108.5 was for non-life insurance and LTL 16.7 - for life assurance. To compare with the figures of 2001, changes are significant. During the year 2001 non-life insurance premium per capita was LTL 120.2, while life assurance - LTL 26.6.

Table 26
Structure of Insurance Market in Baltic Countries

|        | Structure o          | f Insurance M              | arket in Baltic         | Countries         |
|--------|----------------------|----------------------------|-------------------------|-------------------|
| Q      |                      |                            |                         |                   |
| Count: |                      | 2001                       | 2002*                   |                   |
|        |                      |                            |                         |                   |
| Eston  | ia                   |                            |                         |                   |
| -      | total number         | of insurance               |                         | EUR mln. 83.3     |
|        | including lif        |                            | _                       | cent 15           |
|        |                      | of payments, EU<br>47.5    |                         | 40.7              |
| Latvi  | a                    |                            |                         |                   |
|        | total number 167.7 1 |                            | ontributions, EU<br>3.6 | R mln. 160.3      |
| -      | including lif        |                            | ntributions, per<br>5.3 | cent 7            |
| -      | total nu 55.4        | umber of 60.1              | payments, 67.3 48       | EUR mln.          |
| Lithu  | ania                 |                            |                         |                   |
|        |                      | of insurance c<br>25.4 144 |                         | R mln. 100.7      |
| -      | including<br>18      | life-insurance<br>17 1     | contributions           | , per cent.<br>.6 |
| -      | total nu             |                            | payments,               | EUR mln.          |

Baltic countries

| - | total | number | of  | insurance | contributions, | EUR | mln. | 344.3 |
|---|-------|--------|-----|-----------|----------------|-----|------|-------|
|   | 376.2 | 4      | 13. | 7 353     | 3.6            |     |      |       |

| - | including | life-i | nsurance | contributions, | per | cent |
|---|-----------|--------|----------|----------------|-----|------|
|   | 41.8      | 43.1   | 50.7     | 45.9           |     |      |

<sup>\*</sup>January- August

Source: Estonian Insurance Supervisory Authority; Financial and Capital Market Commission (Latvia); State Insurance Supervisory Authority (Lithuania).

In order to have a picture of the evolution of the insurance markets in Baltic States it is useful to examine both insurance density and penetration rates. Both measures employ local host country factors to chart the relative progress of insurance. It can also be used to gauge the impact of both life and non-life branches.

To be more specific, insurance density rates measure premium volume in relation to a host country's own population, i.e. how much money per capita is spent annually on insurance related products. This measure is a useful indicator, as generally host country populations remain constant over short periods of time, but in all Baltic countries in the period 1998-2001 their population levels have been gradually decreasing. In contrast the density rates remain stable with exception of the Latvian case.

However, Latvia has experienced some negative fluctuations in life premium income at this period. Consequently, density rates have also suffered from these fluctuations. It is also evident that the life sector has experienced far more volatility than the non-life sector. In the period 1998-2001, Latvia experienced a drop in insurance density rate by 50 percent and was EUR 3 at the end 2001. This can be explaining by the impact of 1998 Russian financial crisis combined with non-favourable legislation for life insurers.

Positive tendencies are expected to continue on the Baltic's life insurance market because the life insurance has an enormous growth potential. For the sake of comparison, the EU life insurance density rate is forecast for 2002 will amount to EUR 1372.

However density rates are subject to exchange rate volatility. Moreover, because purchasing power generally differs between countries, as do the costs associated with various insurance products, this too could account for country differences. Given this situation it is necessary to evaluate premium income levels in relation to another host country measure, namely GDP, which is utilized to calculate insurance penetration rates.

Insurance penetration rates measure insurance activity in terms of premium volume as a share of GDP in a respective host country. As such, it measures the significance of the insurance industry in comparison to a host country's total

domestic economic activity. It is a useful measure because it is not affected by currency fluctuations as the calculation utilizes only the national currency of a given host country with respect to both premium income and GDP.

In the Baltic's the average insurance penetration rate for life activity was about 0.25 percent of GDP during the 1998-2001 period. In comparison, the EU life insurance penetration rate for total insurance activity will account for 5.6 percent of GDP at the end of 2002 (Table 27).

Table 27

| 1998              | 1999                      | 2000                | 2001                         |         |
|-------------------|---------------------------|---------------------|------------------------------|---------|
| Estonia           |                           |                     |                              |         |
| -<br>1.7          | 1.8                       |                     | <u>-</u>                     | percent |
| - incl.<br>0.3    | li:<br>0 3                |                     | insurance,<br>.4 n.a.        | percent |
|                   | ation (average            | ), thous.           | 1 370                        | 1       |
| - Insura<br>853   |                           | den                 | sity,                        | EKK     |
| - incl.<br>142    |                           |                     | n.a.<br>insurance,<br>2 n.a. | EKK     |
| - Life<br>14      |                           |                     | density,                     | EUR     |
| Latvia            |                           |                     |                              |         |
| - Insura<br>2.5   | ance<br>2.4               | penetra<br>4 2.     |                              | percent |
|                   | ation (average<br>2 390.5 |                     | 2 355.0                      | 2       |
| - Insura<br>36.6  | ance                      | den<br>5 40.3       | sity,                        | LTV     |
| - incl.           | 1                         | ife<br>1.6          | insurance,                   | LTV     |
| - Life<br>3.0     |                           | urance              | density,                     | EUR     |
| Lithuania         |                           |                     |                              |         |
| - Insura          | ance                      | penetra<br>0.       |                              | percent |
| - incl.<br>0.15   | li:<br>0.1                | fe<br>7 0.17        | insurance,<br>0.19           | percent |
| - Popula<br>567.1 | ation (average<br>3 542.4 | ), thou.<br>3 518.5 | 3 484.0                      | 3       |
| - Insura<br>134.9 | ance                      |                     | sity,<br>146.8               | LTL     |
| - incl.<br>18.7   | 1                         | ife<br>9 21.7       | insurance,                   | LTL     |
| - Life<br>8.0     |                           | surance             | density,                     | EUR     |

| - | Life<br>5.6    | insurance | penetration, | percent |
|---|----------------|-----------|--------------|---------|
| - | Life<br>1372.0 | insurance | density,     | EUR     |

Source: Estonian Insurance Supervisory Authority; Financial and Capital Market Commission (Latvia); State Insurance Supervisory Authority (Lithuania); \*CEA forecast for 2002

Lithuania and Estonia had the highest average for life insurance as a percentage of total premiums during the 1998-2001 period studied in comparison to Latvia. Although, it should be pointed out that at the end of 2001 the annual value of life business in Lithuania was extremely low in euro terms at just EUR 23.8 million. The annual value in neighbouring Latvia was smallest of the three Baltic States at EUR 5.2 million and Estonia had the second place in EURO value with an annual of EUR 21.7 million (Table 28).

As of January of 2002, The Latvian legislation guarantees several tax breaks for employers regarding their life insurance payments in fervour of their employees and regarding the private pension funds. Beginning in 2002, individuals can also get tax breaks when insuring their health. These legislative amendments paved the way for the rapid development of the life insurance sector in 2002 in Latvia. Completely opposite legislative changes were the reason for the shrinking life insurance market some years ago.

Table 28
Structure of Life-Insurance Market

| Count     | _             | 2000       |          | 2001            | 200          | )2*  |           |
|-----------|---------------|------------|----------|-----------------|--------------|------|-----------|
| <br>Estor | .i.           |            |          |                 |              |      |           |
|           |               | _          | _        |                 |              | _    |           |
| -         |               |            | of conta | ributions<br>16 | , EUR<br>5.9 | mln. | 12.5      |
| Latvi     | la            |            |          |                 |              |      |           |
| -         | Total<br>6.7  | number     |          | ributions       | , EUR<br>6.3 | mln. | 11.2      |
| Lithu     | ıania         |            |          |                 |              |      |           |
| -         | Total<br>18.8 | number     | of conta | ributions<br>22 | , EUR<br>2.7 | mln. | 18.1      |
| Balti     | Lc            |            |          |                 |              |      | countries |
| 41.8      |               | 43.1       |          | 50.7            |              | 45.9 |           |
| _         | Estoni        | a,         |          |                 | per          |      | cent      |
|           | 30.0          |            | 40.8     | 42.8            | }            | 36.8 |           |
| _         | Latvia        | <b>1</b> , |          |                 | per          |      | cent      |
|           | 26.7          | - ,        | 15.5     | 10.3            | _            | 13.7 | 000       |

V.Katkus, R.Lazutka. The Establishment of the Pension Funds System in the Baltic States.

| - Lithuania, |       | pe    | er    | cent  |
|--------------|-------|-------|-------|-------|
| 43.3         | 43.7  | 46.9  | 54.5  |       |
| - In         |       |       |       | total |
| 100.0        | 100.0 | 100.0 | 100.0 |       |

<sup>\*</sup>January- August

Source: Estonian Insurance Supervisory Authority; Financial and Capital Market Commission (Latvia); State Insurance Supervisory Authority (Lithuania).

The Baltic insurance markets tend to be quite concentrated as a bank sectors. For example, in Estonia and Lithuania the top three insurers control a combined market share of more than 80 percent of the life sector. There are two forces responsible for this general trend of market concentration in the Baltic states: the role of former state insurers and insurers with foreign capital.

Taking the former State insurers, these firms were already established in their respective home Accordingly, when the transformation began they were in a good position to weather the market contractions of the early phase of the process (1989-95). Former State insurers have embraced foreigner capital by privatization process. As for the role of insurers with foreign capital, the more successful foreign entrants moved early and aggressively and leveraged their know-how to full effect. This is the case in Lithuania with "Lietuvos draudimo gyvybes draudimas"and "Lietuvos draudimas" and "Latva"in Latvia taken by Danish insurer "Codan". Besides, a key ingredient to their success was a long-term perspective of the market that placed market share considerations above short-term return-on-investment criteria.

Table 29
Life-insurance Market in Estonia (January -August 2002)

| EUR million                       | per cent |               |
|-----------------------------------|----------|---------------|
| Hansapanga Kindlustus             |          | 7.358         |
| 43.5 Uhispanga Elukindlustus 23.0 |          | 3.889         |
| Seesam                            | 4.5      | Elukindlustus |
| 2.875<br>ERGO                     | 17.0     | Elukindlustus |
| 1.548                             | 9.1      | -1 1 1 11 1   |
| Sampo<br>1.010                    | 6.0      | Elukindlustus |
| Nordika                           |          | Elukindlustus |
| 0.250                             | 1.4      |               |
| Total                             | 100.0    |               |
| 16.929                            | 100.0    |               |

Source: Estonian Financial Supervisory Authority.

Table 30

Life-insurance Market in Latvia (January -August 2002)

| EUR million | per cent |                   |
|-------------|----------|-------------------|
| Ergo        |          | <br>Latviadziviba |
| 2.209       | 35.2     |                   |
| Baltikums   |          | dziviba           |
| 1.793       | 28.6     |                   |
| Latva       |          |                   |
| 1.220       | 19.5     |                   |
| Seesam      | Life     | Latvia            |
| 0.518       | 8.3      |                   |
| Sampo       |          | dziviba           |
| 0.475       | 7.5      |                   |
| Salamandra  |          | Baltik            |
| 0.053       | 0.9      |                   |
| Total       |          |                   |
| 6.269       | 100.0    |                   |

Source: Financial and Capital Market Commission .

Table 31
Life-insurance Market in Lithuania (January -August 2002)

| EUR million                             | per cent          |           |
|---|-------------------|-----------|
| Lietuvos draudimo gyvybes drau          | udimas            | 10.495    |
| 46.2<br>Lietuvos                        |                   | draudimas |
| 4.043<br>Ergo Lietuva Gyvybes draudimas | 17.8              | 3.476     |
| 15.3<br>VB Gyvy                         |                   | draudimas |
| 2.988<br>Sampo gyvybes draudimas        | 13.1              | 0.650     |
| 2.9<br>Commercial Union Lietuva G       | yvybes draudimas  | 0.472     |
| 2.1<br>Lietuvos žemes ukio banko g      | gyvybes draudimas | 0.216     |
| 0.9<br>Lindra –                         | gyvybes           | draudimas |
| 0.187<br>Bonum                          | 0.8               | Publicum  |
| 0.145<br>Seesam Lietuva Gyvybes Draudim | 0.6<br>nas        | 0.043     |
| 0.2<br>Preventa                         |                   |           |
| 0.007                                   | 0.1               |           |
| Total<br>22.726                         | 100.0             |           |

Source: State Insurance Supervisory Authority.

Foreign life-insurance companies aim at establishing their branches in every Baltic country. "Alte Leipziger Europa" (Germany), Seesam (Finland) and Sampo (Finland) went the same direction and established their independent life-insurance companies in Estonia, Latvia and Lithuania.

In 2002, a Polish largest insurance company PZU acquired a Lithuanian company "Lindra - gyvybes draudimas" and expects to expand its activities in Latvia (Table 32).

Table 32 Life-insurance companies - share of foreign insurance groups

|  | +   |                         |
|--|---|-------------------------|
| Foreign insurance group<br>Latvia                          | Lithuania                                 | Estonia                 |
| Germany  | Ergo Lithuania<br>bes draudimas           | ERGO<br>Elukindlustus   |
| Seesam International                                       | esam Lietuva<br>Company<br>ybes Draudimas | Seesam<br>Elukindlustus |
| Sampo Insurance Compan<br>Sampo<br>Finland<br>dziviba gyvy | y,<br>Sampo<br>bes draudimas              | Sampo<br>Elukindlustus  |
| Codan,<br>Latva Lie  | tuvos draudimo                            | Denmark                 |
| gyvybes draudimas  Aviva, Commercial Union                 | Great                                     | Britain                 |
| Lietuva Gyvybes draudimas                                  |   | Dolond                  |
| PZU,<br>Lindra - gyvybes<br>draudimas                      |   | Poland                  |

Source: Estonian Insurance Supervisory Authority; Financial and Capital Market Commission (Latvia); State Insurance Supervisory Authority (Lithuania).

In the Baltic financial market strong commercial banks establish their subsidiary life-insurance companies. Attempts of bank-assurance development are also obvious. By definition bank-assurance is provision of insurance and banking products and services through a common distribution channel and/or to the same client base. It is obvious in Estonia and Lithuania (Table 33).

Meanwhile, in Latvia, where the commercial banks concentration is not that high, there prevail life insurance companies, which were established by the foreign insurance companies.

Table 33
Life-insurance companies - bank subsidiary companies

| Country<br>Life insurance company  | Bank                       |
|------------------------------------|----------------------------|
|                                    |                            |
| Estonia<br>Uhispanga Elukindlustus | Uhispank                   |
| Hansapanga Kindlustus              | Hansapank                  |
| Latvia<br>-                        | -                          |
| Lithuania<br>VB Gyvybes draudimas  | Vilniaus bankas            |
| Lietuvos žemes ukio banko          | Lietuvos žemes ukio bankas |
| gyvybes draudimas                  |                            |

Source: Estonian Insurance Supervisory Authority; Financial and Capital Market Commission (Latvia); State Insurance Supervisory Authority (Lithuania).

Baltic life-insurance market is under control of the Nordic financial groups. At the end of August 2002, those groups controlled 72 per cent of the overall Baltic life-insurance market (Table 34).

Fife largest life-insurance groups have 88 per cent of the overall Baltic life-insurance market.

Table 34

Fife largest life-insurance groups in the Baltic countries

|  | January - August, 20<br>illion per ce |                    |
|--|---------------------------------------|--------------------|
| Latva Denmark Lietuvos draudimo gyvybes draudimas  | illion per ce                         | Codan<br>34        |
| Hansapanga Kindlustus<br>Sweden  | 7.358                                 | Swedbank<br>16     |
| ERGO Elukindlustus 7.233 16 Ergo Latviadziviba Ergo Lietuva Gyvybes draudimas                | Alte Leipziger                        | Europa Germany     |
| Uhispanga Elukindlust<br>Sweden<br>VB Gyvybes draudimas                                      | us<br>6.877                           | SEB<br>15          |
| Seesam Elukindlustus<br>Finland<br>Seesam Life Latvia<br>Seesam Lietuva Gyvybes<br>draudimas | 3.436                                 | Pohjola Group<br>7 |
| Total<br>40.6 8  | 8                                     |                    |

Source: Estonian Insurance Supervisory Authority; Financial and Capital Market Commission (Latvia); State Insurance Supervisory Authority (Lithuania).

The Baltic life insurance market can be compared with markets of Hungary, the Czech Republic and Poland. The total population of the Baltic countries is 7.0 million, while in Hungary there are 10.1 million people and in the Czech Republic - 10.3 million, so it is possible to compare them in terms of the number of inhabitants. Comparison is based on data given for 2000/2001.

The development of life-insurance market in the Baltic countries lags considerably behind three best respective markets in the Eastern and Central European countries (Table 35).

Table 35

Life-Insurance Contributions/All Insurance Contributions, per cent

| 2000   | 2001             |              |
|--|------------------|--------------|
| Hungary<br>46.2<br>The Check :<br>35.8<br>Poland | 41.7<br>Republic | 32.9<br>40.0 |
| 41.4   |                  | 10.0         |
| Estonia<br>18.0<br>Latvia                        | 19.0             |              |
| 4.0<br>Lithuania                                 | 3.0              |              |
| 17.0   | 19.0             |              |

Source: Estonian Insurance Supervisory Authority; Financial and Capital Market Commission (Latvia); State Insurance Supervisory Authority (Lithuania); CEA.

## 11.2. Investment portfolios of life insurance companies

Given the nature of insurance, a great deal of this premium income is reinvested within local financial markets making insurers significant institutional investors in the Baltic's economy.

In the Baltic's the total investments of life insurance companies comprised more then EUR 140 million at the end of 2001. Approximately 50 percent of the investments relate to technical provisions. Life insurance companies in Latvia accounted for investments of EUR 54 million (total investments of insurance companies amounted to EUR 172 million). The total investments in Estonia (2000) were 34 EUR million, and in Lithuania - EUR 48 million (total investments of insurance companies amounted to EUR 215 million).

The Baltic countries have adopted legislation that puts both quality and quantity limitations upon investments. In Latvia and Estonia, quantity limitations apply only to technical provisions. In Lithuania the quantity limitations applied also to the owners' equity was abolished in 2002.

The most important type of investments (more than 40 percent in the Baltic countries) is bonds and other fixed interest securities. It accounts for 80 percent (including 3.6 percent in companies bonds) of investments in Lithuania, 40 percent - in Latvia. . In total, bonds and other fixed interest securities account for 60 per cent of investments in the Baltic countries. Another important investment type is deposits with credit institutions. It accounts for 20 percent

in the Baltic countries. In Latvia it is 25 percent and only 11.2 percent in Lithuania. In total, shares and other securities account for 15 per cent of investments in the Baltic countries, 20.3 percent - in Estonia (2000), 1.7 percent - in Lithuania. It should be noted that shares and other securities accounted for 28 percent of investments in Estonia in 1997 (Table 36). Obviously, investments in shares and other securities are viewed with slight suspicion as the Baltic stock markets experienced fast growth and equally fast downfall in 1996-1998 (the increase was 400 percents in Estonia, in Latvia it was nearly 1000 percents). Currently, stock markets in the Baltic countries are rather inactive and small.

Investments in real estate account for the total of 2.6 percent in the Baltic countries. In Latvia, insurance companies held considerable amounts in bank accounts or as cash in hand. At the end of 2001 the amount reached approximately EUR 13.5 million. These amounts are smaller in Estonia and Lithuania.

In order to assess the investment volume in each country, one must take into account the different requirements as regards the minimum share capital of life insurance companies. It was about EUR 1.7 million in Latvia in 2001, about EUR 0.9 million - in Estonia, about EUR 1.2 million in Lithuania.

In Estonia and Lithuania, the ratio of technical provisions to owners' funds is around 2, while in Latvia - around 1. It means that Latvian life insurance companies are rather over-capitalized.

Table 36
Investment structure of the Baltic's life insurance companies,
percent (2001)

| Estonia*                  | Latvia               | Lithuania     |
|---------------------------|----------------------|---------------|
| Bonds, fixed-income s     | ecurities<br>80.1    | 52.8          |
| Shares, other variabl     | e-yield securities   | s 20.3        |
| Real<br>2.3               | 4.0                  | estate<br>1.5 |
| Deposits with credit 25.0 | institutions<br>11.2 | 24.2          |
| Mortgages<br>0.0          | 1 0                  | loans<br>0.7  |

V.Katkus, R.Lazutka. The Establishment of the Pension Funds System in the Baltic States.

| Cash<br>0.0  | 0.0  | 4.4                |
|--------------|------|--------------------|
| Other<br>0.1 | 15.0 | investments<br>0.4 |

<sup>\*</sup>Figures for 2000.

Source: Estonian Insurance Supervisory Authority; Financial and Capital Market Commission (Latvia); State Insurance Supervisory Authority (Lithuania).

Baltic States life insurance companies investments based on the home markets. 97 percents of the Latvian life insurance investments was allocated in the domestic markets and 95 percent of the Lithuanian life insurance portfolio remains at home.

In Lithuania in 2001, the return on equity decreased from to 4.5 per cent. The main reasons of the decline in profitability are as follows: the profitability of investment activity has decreased due to shrunk earning power securities (due to which in 2001 the return on investment has decreased from 8.2 to 7.6 per cent) and negative or comparatively smaller capital return οf three established enterprises (Table 37).

Table 37 Review of operations of life insurance companies in Baltic's

| 1997       | 1998         | 1999       | 2000              | 2001  |      |      |
|------------|--------------|------------|-------------------|-------|------|------|
| Estonia:   |              |            |                   |       |      |      |
|            |              |            |                   |       | 27 0 |      |
|            | 6.0          | surance ii | nvestments, % 4.9 |       | 37.0 | _    |
|            |              | 0          | 4.9               | 11.a. |      |      |
| - Retur    | n on equity, | ď          |                   |       |      |      |
| Latvia:    |              |            |                   |       |      |      |
| - Yield    | of life      | insurance  | investments,      | %     |      | 11.4 |
| 9.6        | 3.8          |            | 12.5              | 3.1   |      |      |
| - Retur    | n on equity, | , %        |                   |       |      | -7.5 |
| -1.5       |              |            | 0.5               | 1.5   |      |      |
|            |              |            |                   |       |      |      |
| Lithuania: |              |            |                   |       |      |      |
| - Yield    | of life i    | nsurance   | investments,      | %     |      | n.a. |
|            | 7.9          |            | 8.2               | 7.6   |      |      |
| - Retur    | n on equity, | %          |                   |       |      | n.a. |
| n.a.       | 1.5          |            | 6.5               | 4.5   |      |      |

Yield of investments = Investment income, net / Average value of investments

Return on equity = Profit or loss of financial year / Paid-up capital

Source: Estonian Insurance Supervisory Authority; Financial and Capital Market Commission (Latvia); State Insurance Supervisory Authority (Lithuania).

The level of income is still very low in the Baltic countries. Households do not really have disposable income to purchase insurance or make adequate savings. According to UNDP, Baltic countries have only 3 per cent - 5 per cent households that have enough income to make savings. Thus there could be about 500 - 700 thousand potential customers in the Baltic countries who could purchase life insurance. If to compare this figure with the number of insurance contracts in force in the Baltic countries, one might conclude that the potential customers have been covered by now. The growth of the market potential depends on the development of economic activities leading to the increase of household income.

The financial crisis in Russia in 1998 had an adverse impact on the economies of the Baltic countries - many local producers lost the customers in the Russian market. However, there are also positive signs. Projections are that the GDP will grow considerably in the Baltic countries in 2002. Inflation is still low. According to the UN- European Economic Commission report (November 2002) in 2003 economic growth rate in Baltic States will exceed more than 5 percent and will be the highest in East and Central Europe.

Within the framework of the pension system reform, the Baltic countries have developed legislation that is necessary for the activities of pension savings. The establishment of the third pillar will have big impact on the growth of life insurance companies in Estonia and Latvia. The legislation in Lithuania provides for the pension contributors an option between the pension funds and life insurance companies. The legislation in this Baltic country more favourable to life insurance companies than to new pension funds. Due to such legislation base we expect that the life insurance industry in Lithuania will grow faster than in other Baltic States.

## 12. Baltic capital markets

Baltic securities markets have developed late in the transition process due to a high inflation environment. National Stock Exchange of Lithuania (NSEL) started operations in 1993 with a short list of privatised and new companies. In Latvia and Estonia, the stock exchanges were even slower getting started. The Riga Stock Exchange (RSE) was opened in 1995 and Tallinn Stock Exchange (TSE) in 1996. The exchanges moved from a daily call auction to gradually introduction a continuous trading system. These stock exchanges created infrastructure for the Baltic's securities market.

In Latvia, the emphasis in the securities markets has been on treasury bills and government bonds. At the end of 2001 the

amount of outstanding Latvian government securities was EUR884 million (10.5 percent of GDP), EUR425 million of which was euro-denominated and equity capitalisation EUR 782 million (9.3 percent of GDP).

In Lithuania, listed stocks constitute only 10 per cent of GDP. The outstanding stock of domestic debt instruments (capitalisation above 4 per cent of GDP) is dominated by government securities, whereas corporate debt securities are negligible.

Unlike in Latvia and Lithuania, Estonian government debt securities have not been one of the driving forces of capital markets development, since the central government constitutionally barred from running budget deficits. Therefore, the securities market in Estonia consists primarily of an equity market, and the debt market has developed only due to the issuance of corporate debt instruments. At the end of 2001 the debt market capitalisation was EUR 281 million (5 percent of GDP) and stock market capitalisation EUR 1.687 million (28 percent of GDP).

During the years capital market capitalization has fluctuated considerably as the price of shares have changed. New listings sometimes increase the market capitalization quite considerably, e.g. Estonian Telecom and Lithuanian Telecom.

It is assumed that different fiscal policies in Estonia, Latvia and Lithuania determined the establishment of different securities markets structures.

## 12.1. Fixed income securities market

**Estonia.** Bond market capitalization has been traditionally very low in Estonia due to the lack of government bonds. The debt market has developed only according to private sector instruments and needs, being mainly a primary market and only a modest secondary market. The main issuers on the market are Nordic financial conglomerates, which are also major stakeholders in Estonian credit institutions. Their bond issues account for approximately 80 per cent of the primary market, reflecting the high integration of Estonian and Nordic financial markets. At the end 2001 the capitalization of the bond market amounts to about EUR 6 million. Maturities are mainly short-term. The most common instruments are 3-6 month commercial papers (75 per cent of bonds issued). Interest rates of debt securities have been following quite closely the interbank offer rate of TALIBOR.

**Debt securities market** 

1996 1997 1998 1999 2000 2001 Debt market capitalization to GDP (%) 6 5 4 4 5 Debt market capitalization (EUR million) 150 235 237 258 205 281 o/w non-resident investors (%) 19 32 10 3 1 16 Debt market turnover (EUR million) 20 482 1,078 194 106 466 Debt market turnover to capitalization (%) 13 187 227 82 38 458 325 324 253 419 New debt securities' issues (EUR million) 228 100 o/w public issues (%) 2 2 4 4 6 0

Table 38

Source: Bank of Estonia

**Latvia.** The Latvian fixed security market offers government debt securities, debt securities of joint stock companies, mortgage bonds and other securities. The private debt securities were valued at less than EUR 40 million at the end of June 2002. At the same time, the nominal value of government securities was EUR 450 million.

Most of the bonds are three or five year T-bonds. At the end 2001 the structure of outstanding government domestic currency securities comprised from 11.6 per cent of T-bills, 5.8 per cent of 2-years T-bonds, 27.5 per cent of 3-years T-bonds and 55.1 per cent of 5-years T-bonds (Table 39).

Bond yields are usually higher than credit rates and therefore refinancing via bonds is not an attractive alternative to companies. Only a few issuers (mostly banks) are able to ensure the successful placements of securities. Many companies prefer to attract funds through closed issues of debt securities that cannot be traded at the RSE. The public traded private debt securities maturities become longer and this yield curve lengthening also promotes inflows of long-term investments from insurers and pension funds. The end of privatization of large state companies will help to accelerate the development of local bond markets, because they are able to enter the domestic bond market via large issue volumes.

Table 39
Outstanding amount of fixed income securities (end of 2001, EUR million)

| Issuer                                | Total | Sho | rt-tern | n       |     | Loi     | ıg-te | erm    |  |  |
|---------------------------------------|-------|-----|---------|---------|-----|---------|-------|--------|--|--|
|                                       |       | T < | 1       | 1 < T < | < 5 | 5 < T < | 10    | T > 10 |  |  |
| Central government                    | 884   |     | 53      | 1:      | 53  | 678     | }     | 0      |  |  |
| Monetary financial institutions       | 48    |     | 0       |         | 9   | 3       | 80    | 9      |  |  |
| Non-monetary financial intermediaries | 35    |     | 14      |         | 21  |         | 0     | 0      |  |  |
| Non-financial enterprises             | 2     |     | 0       |         | 0   |         | 0     | 2      |  |  |
| Total                                 | 969   |     | 67      | 18      | 33  | 708     | 3     | 11     |  |  |

Source: Bank of Latvia. T = years to maturity

The trading in the debt market really started only in 2000. One reason was that the trading started with government securities on the official list at the end of 1999. Usually all Latvian banks hold government T-bills or bonds, but only a few banks have invested in Latvian private debt securities. In 2001, the turnover of debt securities amounted to EUR 720 million. The daily turnover of government fixed income securities was EUR 2.8 million in 2001, the daily turnover of private fixed income securities amounted to EUR 0.2 million on the RSE (Bank of Latvia, 2001).

**Lithuania.** The outstanding stock of domestic debt instruments (capitalization above 4 per cent of GDP) is dominated by treasury securities, whereas corporate debt securities are issued in small amount. The rationale for the relatively low level of development of the local debt market is linked to the, in general, low public debt burden and its high share of foreign currency-denominated debt. The latter restrains the local bond markets' development in combination with the prohibition to issue debt securities denominated in foreign currencies domestically.

Debt instruments other than plain fixed-rate bonds – such as floating-rate, inflation indexed or exchange-linked debt securities – are non-existent in the Lithuanian market. In 1999, the

government tapped the market for T-bonds for the first time and since then the longest maturity of issued bonds has been 10 years. The first 10-year bond was issued in March 2002.

Corporate bonds in many cases were distributed in closed form.

Table 40

|                            | 1997 | 1998 | 1999 | 2000 | 2001 |
|----------------------------|------|------|------|------|------|
|                            |      |      |      |      |      |
| Number of:                 |      |      |      |      |      |
| Government debt securities | 38   | 46   | 47   | 55   | 47   |
| T-bills                    | 35   | 43   | 32   | 22   | 10   |
| T-bonds                    |      |      | 3    | 12   | 19   |
| Retail bonds               |      |      | 9    | 14   | 11   |
| Special purpose T-bonds    | 3    | 3    | 3    | 7    | 7    |
| Corporate bonds            | 11   | 6    | 3    | 8    | 9    |
| •                          |      |      |      |      |      |

Source: Bank of Lithuania

As for the bond market, liquidity of the treasury securities market is higher then in stock market. The growing liquidity of treasury securities is also derived from the fact that turnover of government debt securities exceeded stock market turnover for the first time in 2000.

#### 12.2. Stock markets

Despite of large number of initial listings, only small number actively traded stocks remain in Baltic States markets. The official list (most liquid stocks) comprises only 6 companies in every stock exchange. At the end of 2001 the shares of 63 companies were listed at the RSE, 49 companies — at the NSEL and 16 companies — at the TSE (Table 41). Trading in stock exchanges was marked by relatively few shares. At the end 2001 every stock exchange has two companies those turnovers comprise about 70 percent of the stock exchange turnover.

Table 41 Number of listed companies in the Baltic's stock exchanges

| 1997    | 1998 | 1999 | 2000 | 20 | 1993<br>001 | 19 | 94 | 1995 | 1996 |
|---------|------|------|------|----|-------------|----|----|------|------|
|         |      |      |      |    |             |    |    |      |      |
| Estonia |      |      |      |    | 0           |    | 0  |      | 0    |
| 8       | 22   | 25   |      | 23 |             | 20 |    | 16   |      |
| Latvia  |      |      |      |    | 0           |    | 0  |      | 17   |
| 34      | 50   | 69   |      | 70 |             | 63 |    | 63   |      |
| Lithuan | ia   |      |      |    | 0           |    | 13 | }    | 357  |
| 460     | 607  | 60   |      | 54 |             | 54 | _  | 49   |      |

Source: Tallinn Stock Exchange; Riga Stock Exchange; National Stock Exchange of Lithuania.

**Estonia.** Stock market capitalization amounts to EUR 1.9 billion, or to almost 30 per cent of GDP (Table 42). The turnover of the TSE was EUR 0.3 billion in 2001 and trading was concentrated on the shares of a few companies: Hansapank (Bank) and Eesti Telekom (Telecommunication Company) accounted 77 per cent of TSE turnover. At the end of 2001, non-resident investors owned 76% of the stock market capitalization.

Stock market (Tallinn Stock Exchange)

|   | 199 | 6 1997 | 7 199 | 8 1999 | 2000  | 2001  |
|---|-----|--------|-------|--------|-------|-------|
| Stock market capitalization to GDP (%)      | 15  | 20     | 11    | 37     | 36    | 28    |
| Stock market capitalization (EUR million)   | 508 | 837    | 531   | 1,809  | 1,982 | 1,687 |
| o/w non-resident investors (%)              | 36  | 42     | 54    | 75     | 76    | 77    |
| Stock market turnover (EUR million)         | 147 | 1,396  | 853   | 286    | 352   | 262   |
| Stock market turnover to capitalization (%) | 29  | 167    | 161   | 16     | 18    | 16    |
| Number of stock listed (end of period)      | 8   | 22     | 25    | 23     | 20    | 16    |
| Number of licensed securities brokers       | 45  | 45     | 34    | 23     | 22    | 18    |
| o/w member firms of the TSE                 | 18  | 25     | 20    | 12     | 2 8   | 9     |

Source: Tallinn Stock Exchange

After increasing threefold up to 1997 the stock index declined back to its starting point after the Asian and Russian crises. The resulting relatively low price level of stocks attracted foreign investors – mainly from Sweden and Finland – to acquire resident companies, which led to the delisting of several shares from the stock exchange and to a decrease of market capitalization. The trend was reversed only in 1999 with the listing of Eesti Telekom that increased the capitalization of the stock exchange by a factor of 2.5.

**Latvia.** The development of the Riga Stock Exchange (RSE) was slow until 2000, when capitalization of the market doubled and the total turnover of the market became eight-fold (Table 43). Currently, there are only five shares on the official list and the total number of listed shares is 63. The market capitalization of RSE amounted to EUR 0.782 billion (10% of GDP) at the end of 2001. The total stock market turnover amounted to EUR 0.184 billion. This year the turnover of shares has been somewhat lower than a year ago.

Table 43 Stock market (Riga stock exchange)

|                                       | 1990 | 5 1997 | 1998 | 3 1999 | 2000 | 2001 |
|---------------------------------------|------|--------|------|--------|------|------|
| Equity capitalization (EUR million)   | 122  | 303    | 341  | 368    | 623  | 782  |
| Equity capitalization (as % of GDP)   | 3.0  | 6.1    | 6.3  | 5.9    | 8.0  | 9.3  |
| Total turnover (EUR million)          | 10   | 74     | 61   | 40     | 302  | 184  |
| Equity turnover to capitalization (%) | 8    | 24     | 18   | 11     | 49   | 24   |
| Number of listed shares               | 34   | 50     | 69   | 68     | 63   | 63   |

Source: Riga Stock Exchange, Bank of Latvia

Official list companies were the leaders in equity market, contributing 93.5 per cent of total equity trading volume Latvijas Gaze (Gas supplier company), Ventspils nafta (Oil

Table 42

transportation) and Balta (Insurance company) shares were the most popular among the investors. Non-residents own 56 per cent of the shares in RSE. Main investors in stock market like in bond market are banks.

**Lithuania.** At the end 2001 the Lithuanian stock market by capitalization was largest in the Baltics and amounted to EUR 2.9 billion, or to almost 22 per cent of GDP (Table 44). Listed stocks constitute only 10 per cent of GDP and, therefore, do not constitute a vital pillar for the financial intermediation process in Lithuania.

Until the end 1997 the NSEL has the most listed companies of all the Baltic stock exchanges. At the end 1996 the market capitalization was EUR 946 million, over 400 shares was listed on the NSEL, but only half of them were quoted at all. Of this only 30-40 companies are actively traded. The number of listed companies increased during the 1997, but then changes in listing requirements drastically decreased the number and the end of 2001 only 28 companies were listed on the NSEL.

Table 44
Stock market (National Stock Exchange of Lithuania)

|  | 1         | 996        | 199 | 97 19                   | 98 19                    | 99 200             | 00 2001                 | [  |
|--|-----------|------------|-----|-------------------------|--------------------------|--------------------|-------------------------|----|
| Stock market capitalization to GDP (%) Stock market capitalization (EUR million) Stock market turnover (EUR million) Stock market turnover to capitalization (%) | 15<br>946 | 2<br>1 950 | _   | 28<br>2 681<br>198<br>8 | 30<br>3 000<br>290<br>10 | 27<br>3 285<br>219 | 22<br>2 943<br>235<br>8 |    |
| Number of stock listed (end of period) 54 49 Number of licensed securities brokers   | 460<br>63 | 4          | 59  | 607                     | 43                       | 60                 | 28                      | 54 |

Source: National Stock Exchange of Lithuania

The official list comprises only 6 companies. "Lietuvos Telecomas" (Telecommunication Company) capitalization makes up 2.1 per cent of GDP, 60 per cent of the capitalization of the stocks in the official list and more than 20 per cent of the capitalization of all listed stocks, while the top five listed stocks account for more than 60 per cent of the listed stock capitalization.

In 2001 foreign portfolio equity investors held approximately 8 per cent of the total listed stock capitalization or more than a half of the estimated total free-float capitalization. The influence of foreign investors appears quite substantial.

The turnover of the stock market was EUR 0.235 billion in 2001 and the ratio of the stock market to capitalization tend to be lowest in the Baltic's stock exchanges. In Lithuania the Treasury bills boosts the capital market liquidity in NSEL.

The absence of pension funds, the lack of mutual funds as well as other institutional investors result in an insignificant role for the securities market. The securities market still awaits the implementation of the pension reform, which is scheduled to take place in 2004. Other explanations may also relate to the lack of an investment culture, the low knowledge of financial markets within the society, the long bear trend and a still low level of savings. Enterprises cannot rely on the stock market in their funding decisions, as indicated by the latest statistics. Over the last three years the majority of equity issues were private placements and in 2001 constituted a mere 1 per cent of GDP.

# 12.3. Globalization and the Baltic's capital markets

In the Baltic's the elements of the globalisation trend has been the de-listing and in smaller sense the migration of some stock exchange activities abroad that hit the national stock exchanges. If this process will continue it can leave too little domestic activity to sustain local exchanges.

The de-listing of some of the larger stocks after takeovers by multinationals has been the factor, which reduced the list of most liquid stocks in the Baltic's. For examples in Lithuania, after privatisation of the banks their stocks disappeared from the NSEL most liquid stocks list.

After the 1998 Russian crisis, some of the previously privatised firms in the Baltic States were purchased by foreign or local private investors that bought out minority shareholders, converting them into closely-held companies, and sometimes de-listed them from the exchanges. Explanations for this may be related with a lack of investor protection and rent seeking by controlling shareholders.

Second element of the globalisation trend has been the migration of capital raising, listing, and trading activity to international exchanges. Depository Receipts (DRs), for example, are popular instruments. Foreign investors interested in regional stocks favour buying them through the more liquid American or global depository receipts listed in London, New York, or Frankfurt. Since the costs of cross-listing include a large fixed cost element, they bear most heavily on small companies. Thus, we expect larger companies to be more likely to cross-list. This is the case in Baltic States. From 1996 some 8 big Baltic's companies issue DRs. The degree of migration to international exchanges rather is stable.

Undoubtedly, the national stock exchanges are needed for the companies issuing securities for the first time. However, the number of IPO is very low.

As mentioned, the Baltic's stock markets were dominated by only a few big companies, leaving little room for investor diversification and the financing of medium-sized enterprises. The corporate debt market is small and of little significance in three economies.

The decline in trading volumes in the Central and Eastern European exchanges and investor apathy has led some analysts question whether every country should have a exchange. Geographical location will diminish in significance as a determinant of where companies choose to list and firms will increasingly list their securities on more than one market. The globalisation of securities trading around the the traditional is pushing stock exchanges consolidate in order to offer competitive services investors and issuers. These tendencies are already reflected in the growth of cross-border listings. As a first step at the beginning of the 2000 the three Baltic exchanges established a common Baltic list, which has 15 most liquid stocks of exchanges (www.baltic-exchanges.com). This helped to harmonise regulations and trading facilities. The common Baltic list is hoped to increase the attractiveness of the Baltic's markets for foreign investors.

Most securities markets are under strong pressure for convergence and integration. Liquidity benefits encourage centralisation of market activities in a small number of locations. Over the years, the Baltic region's exchanges have discussed many plans to merge, form a regional exchange, or co-ordinate with each other—or even to link up with the major exchanges as Euronext or with the Scandinavian Stock Exchange alliance Norex with a view to create a one-stop shop for Nordic and Baltic financial instruments.

In Baltic States real consolidation process starts in Helsinki Stock Exchange (HEX). During 2001 the HEX acquired a strategic majority in the TSE and in 2002 in the RSE with the main aim to offer trading facilities for Estonian and Latvian securities in the HEX trading system. In the NSEL the controlling majority belongs to the Lithuanian government, which now considers options to join Euronext via the Warsaw Stock Exchange or the Norex or the HEX.

# 13. Financial supervision in the Baltic's States

There is a long tradition of regulating individual banks and securities markets in many countries. The primary justification for bank regulation that is usually given is the avoidance of systemic risk, or in other words, the avoidance of financial crises. With securities markets it is usually argued the main purposes of regulation are investor protection and enhancing the efficiency of markets.

The changing structure of the emerging economies financial systems has implications for systemic stability and in particular the supervisory regime.

Today, the Baltic banks, insurance companies and brokers' companies have become an integral part of the international conglomerates. The emergence of financial conglomerates that provide a wide range of services adds at least two new dimensions to the supervision and regulation of such entities: one is the issue of consolidated supervision and the other is the architecture of the institutions in charge of supervision. The emergence of financial conglomerates has challenged traditional demarcations between regulatory agencies and has made the business of regulation more complex. The convergence of the Baltic markets to a universal banking paradigm suggest that consolidation of regulatory agencies in charge of banks, securities, and insurance companies would be appropriate to mirror the evolution of the industry. The case for a single regulator is based on similar considerations to the ones that drive the financial services industry: to exploit economies of scale and scope, take advantage of scarce supervisory and

regulatory expertise, internalise the linkages across different activities, as well as to avoid duplication and regulatory burden, and have better accountability and/or governance.

Estonia and Latvia derived useful lessons from the Scandinavian (Denmark, Norway and Sweden) experience with integrated financial supervision. We argue that Baltic's markets share many of the features that have made the Scandinavian experience with integrated financial supervision a successful one: they are relatively small economies that can exploit economies of scale and scope in supervision and they have banks that offer a wide range of financial services-in particular, growing bank-assurance businesses. However, we also argue that, while the original independence of the regulators from their own central banks in the Scandinavian nations contributed to the creation of single agencies, bank supervision in Lithuania markets is still done at the central banks and there are strong reasons for retaining this institutional structure.

Moreover, we must note the experience of Finland, where the existence of a compulsory private pension fund sector led to the establishment of two agencies: one for insurance and pension funds and another for banks and securities. Cases of the Eastern and Central Europe markets that have established a single agency include Hungary. In 2002, Poland merged supervisions of the security and insurance markets into one financial authority.

In Latvia the unified financial supervisory authority, the and Capital Market Commission, started its activities on July 1, 2001. The new independent supervisory authority took over the responsibilities of the Bank of Latvia Institutions Supervision Department, Supervision Inspectorate and Securities Market Commission. Estonia unified the three financial sector supervisory authorities - the Banking Supervision Department of Eesti Pank, Securities Inspectorate and Insurance Supervisory Agency - into a single Estonian Financial Supervision Authority (EFSA). The EFSA started to operate on 1 January 2002. In Lithuania three separate institutions carry out insurance companies and securities market (pension funds) supervision.

International financial conglomerates also force the Baltic States financial supervisory authorities for closer international co-operation with foreign supervisory authorities. This is another additional argument for the unified financial supervisory authority.

## 14. Financial development of the Baltic States

Financial development - as measured by the conglomerate indices of bank activity and stock market activity - is positively and significantly related to economic growth. Indeed, the only financial development indicator that is not significantly related to growth is finance-size, which measures financial size. This result is consistent with the Levine and Zervos (1998) result that market capitalisation is not a robust predictor of economic growth. They show that stock market liquidity, as measured by the total value traded ratio, and banking sector activity, as measured by bank credit to the private sector are robust predictors of growth.

Lithuanian stock market being the biggest one by absolute number in the Baltic States has the smallest liquidity ratio, which seeks up to only 8 per cent. The biggest liquidity ratio of 24 per cent - as measured by the total value traded ratio - has been registered in RSE, after which is TSE with the ratio or 16 per cent.

Differences in the structure of financial markets can also have some implications if financial shocks are important. For examples, Russian crises in 1998 hit the TSE stronger than the other Baltic exchanges. The liquidity - measured as stock market turnover to capitalisation (per cent) - of the TSE dropped from 161 per cent (1998) to 16 per cent (1999).

Although the assets of Latvian banks are the biggest (EUR6.2 billion) in the Baltic States, the rate of bank loan for the private sector/GDP is the biggest in Estonia and amounts up to 25,9 per cent. The smallest bank assets (EUR4.3 billion) and smallest banking sector activity (10,1 per cent) is in Lithuania.

The economy of Estonia experienced a rapid growth due to better restucturised industry and more active banking sector activities. The decline of Estonian industrial production output was the smallest in all the Baltic States.

However, the degree of financial intermediation in the Baltic States remains rather low (Table 45).

Table 45
The Baltic's financial sector structure at the end 2001 (in % of GDP)

|                                 | Estonia | Latvia | Lithuania |  |
|---------------------------------|---------|--------|-----------|--|
| Assets of:                      |         |        |           |  |
| Commercial banks                | 70      | 77     | 32        |  |
| Insurance companies             | 2       | 2      | 1         |  |
| Leasing and factoring companies | 15      | 6      | 3         |  |
| Investment holding companies    | 3       | 0      | 0         |  |
| Capitalization of:              |         |        |           |  |
| Listed stocks                   | 28      | 9      | 10        |  |
| Bond market                     | 5       | 5      | 4         |  |
| Total                           | 123     | 99     | 50        |  |

Source: V.Katkus calculation based on statistic's of Bank of Latvia, Bank of Lithuania, Central Bank of Estonia, Central Statistical Bureau of Latvia, Statistical Office of Estonia, Department of Statistics of Lithuania.

To assess the quality of reforms in the financial sector we employ a widely used aggregate measure of reforms, constructed annually by the European Bank for Reconstruction and Development (EBRD). We chose the EBRD transition indicators because they have clearly identified components, which provide greater scope for our analysis. However, we choose not to embark on a debate on the precision of transition indicators believing that any indicators of reforms face potential criticism since they are prone to subjective errors of judgments.

The situation in the Baltic State economies in these areas is perhaps best summarised by indicators given by the EBRD on the securities market and non-bank financial institutions. On a scale of 1-4, 1 represents little progress; 2 indicates a rudimentary exchange and legal framework; 3 means making some progress (securities are being issued by private firms, there is some protection of minority shareholders and the beginnings of a regulatory framework); 4 means that countries have relatively liquid and well functioning security markets and effective regulations; while 4+ countries have reached the standards and performance norms of advanced industrial countries.

Table 46 EBRD Index of banking sector activity (1991-2001)

| 1997    | 1998   |   | 991<br>99 | 1992<br>2000 | 19<br>200 |    | 1994 | 1995 |    | 1996 |
|---------|--------|---|-----------|--------------|-----------|----|------|------|----|------|
| Estonia |        | 1 |           | 2            |           | 3  |      | 3    |    | 3    |
| 3       | 3+     |   | 3+        |              | 4 –       |    | 4 –  | 4 –  |    |      |
| Latvia  |        |   | 1         |              | 2         |    | 2    |      |    | 3    |
| 3       | 3      |   |           | 3            |           | 2- |      | 3    |    | 3    |
| 3+      |        |   |           |              |           |    |      |      |    |      |
| Lithuan | ia     | 1 |           | 1            |           | 2  |      | 2    |    | 3    |
| 3       | 3      |   | 3         |              | 3         |    | 3    |      | 3  |      |
| Hungary | -      |   |           |              |           |    |      |      |    |      |
| (The be | st)    | 2 |           | 2            |           | 3  |      | 3    |    | 3    |
| 3       | 4      |   | 4         |              | 4         |    | 4    |      | 4  |      |
| Russia  |        |   |           |              |           |    |      |      |    |      |
| (The wo | rst) 1 | _ |           | 1            |           | 1  |      | 2    |    | 2    |
| 2       | 2+     |   | 2         |              | 2-        |    | 2-   |      | 2- |      |

Source: Different EBRD Transition Reports

For the quality of reforms of the banking sector Estonia has achieved a ranking of 4- (4 is best result in region which

achieved Hungary), Latvia - 3+ and Lithuania - 3 (Table 46). The Baltic States cases show that in long run a growing private sector would drive the emergence of supportive capital market institutions. But only Estonia and Lithuania for the quality of reforms of the non-bank sector had ranking of 3 in developing matching capital market and corporate governance mechanisms and Latvia has ranking 2+ (4- is best result in region which achieved Hungary) (Table 47).

Table 47
EBRD Index of financial institution reform (excluding banks)
(1991-2001)

| 1997    | 1998 | 1 | 1991<br>L999 | 1992<br>2000 | 19<br>200 |    | 1994 | 1995 | 199 | 96       |
|---------|------|---|--------------|--------------|-----------|----|------|------|-----|----------|
| Estonia |      | 1 |              | 1            |           | 2- |      | 2-   | 2   | —<br>2 – |
| 2       | 3    |   | 3            |              | 3         |    | 3    |      | 3   |          |
| Latvia  |      | 1 |              | 1            |           | 1  |      | 2    |     | 2        |
| 2       | 2+   |   | 2+           |              | 2+        |    | 2+   | 2+   |     |          |
| Lithuan | ia   | 1 |              | 1            |           | 2- |      | 2    |     | 2        |
| 2       | 2+   |   | 2+           |              | 3 –       |    | 3 –  | 3    |     |          |
| Hungary | -    | 2 |              | 2            |           | 2  |      | 2    |     | 3        |
| 3       | 3+   |   | 3+           |              | 3+        |    | 3+   | 4 –  |     |          |
| (The be | st)  |   |              |              |           |    |      |      |     |          |
| Russia  |      |   |              |              |           |    |      |      |     |          |
| (The wo | rst) | 1 |              | 1            |           | 2- |      | 2 –  |     | 2        |
| 3       | 3    |   | 2-           |              | 2-        |    | 2-   | 2-   | -   |          |

Source: Different EBRD Transition Reports

The EBRD transition indicators confirm that banking sector is more advanced in Estonia and Latvia than capital markets. In Lithuania banking and capital markets systems developed at the same degree (EBRD, 1995, 2001).

# 15. The Baltic States economies characteristics

Baltic economies are tiny. The annual nominal GDP in 2001 was approximately USD 5.5 billion in Estonia, USD 7.5 billion in Latvia and USD 11.9 billion in Lithuania. These economies are also extremely open. The combined value of exports and imports in 2001 were 138 per cent of GDP in Estonia, 73 per cent in Latvia and 91 per cent in Lithuania (Table 48).

Table 4 Baltic economies characteristics at the end 2001

| Countries<br>Population | M2<br>Openess | GDP<br>M2/GDP | GDP ] | per | capita |
|-------------------------|---------------|---------------|-------|-----|--------|
|                         |               | (E+I)/GDP     |       |     |        |

V.Katkus, R.Lazutka. The Establishment of the Pension Funds System in the Baltic States.

| (thousand)                 | billion.USD<br>per cent. | billion.USD<br>per cent | USD           |
|----------------------------|--------------------------|-------------------------|---------------|
| Estonia<br>1.370,1         | 2.878<br>138             | 5.525<br>52.1           | 3,969         |
| Latvia<br>2.377,4          | 2.447<br>73              | 7.577<br>32.3           | 3,249         |
| Lithuania<br>3.484,0       | 3.177<br>91              | 11.992<br>26.5          | 3,438         |
| European                   |                          |                         |               |
| Countries*<br>EU<br>20.700 |                          |                         | 19.900<br>15* |
| OECD*<br>USA*<br>36.500    | in Pigurog. Statistic    | g on the Member Co      | 22.300        |

**Source:** \*OECD in Figures: Statistics on the Member Countries. OECD Observer, 2002/Supplement 1.P 13.

Financial sectors of the Baltic countries are relatively small (total banks assets are about EUR15 billion), even when taking the countries' lower income levels into account. They are dominated strongly by the banking sector than those of euro area countries. Banking sectors are well-capitalised and characterised by strong foreign penetrations. The capital markets (total capitalisation is EUR4.4 billion) even smaller then banking sectors and less relevant to economies. Insurance market is in the early stage of development. In 2001, the total written premium for life insurance amounted only to EUR 50.7 million and for non-life insurance to EUR 363.0 million. In the future insurance market in the Baltic States will be the second power in the financial market after the banks.

Estonia, Latvia and Lithuania are EU accession countries. having integration was indeed seen ΕU as important implications for financial markets. Looking ahead, accession was indeed seen as an important structural change for the banking sector. In particular, it could accelerate a trend towards transforming subsidiaries of foreign banks into branches, in order to reduce costs and avoid constraints on exposure limits (by allowing the parent bank to lend, rather than the subsidiary for which exposure limits would be reached earlier). Many experts agreed that survival was an open issue for Baltic States stock markets, whereas the outlook for bond markets was seen as much more positive (ECB, 2002).

When economists talk about "economic growth," they have in mind growth of per capita income.

The Holzmann's requirement for minimum income level USD 2000 per capita in all Baltic countries was passed in 1996 (Table 49).

Table 49 GDP per capita - index of welfare

| 1997      | 1998  | 1999  | 1993<br>2000 | 1994<br>2001* | 1995  | 1996  |
|-----------|-------|-------|--------------|---------------|-------|-------|
| Estonia   |       | 1.09  | 4 1.544      | 2.417         | 2.980 | 3.174 |
| 3.617     | 3.609 | 3.508 | 3.969        |               |       |       |
| Latvia    |       |       | 848          | 1.442         | 1.779 | 2.070 |
| 2.293     | 2.494 | 2.799 | 3.019        | 3.249         |       |       |
| Lithuania | a     | 716   | 1.143        | 1.623         | 2.129 | 2.588 |
| 2.904     | 2.882 | 3.064 | 3.438        |               |       |       |

Source: Different EBRD Transition Reports

The latest OECD countries GDP comparison based on 1999 Purchasing Power parities classified the Baltic States in IV group as low income countries in the line with Bulgaria, Croatia, Macedonia, Mexico, Poland, and Romania. In III group as low middle-income are included the Czech Republic, Hungary, the Slovak Republic and Slovenia (Table 50).

Table 50 Purchasing power parity (PPP) and international GDP comparison, 1999

|                   | dD.D      | GDP per   |
|-------------------|-----------|-----------|
| capita            | GDP       | OECD 30 = |
| 100               | OECD 30 = | 100       |
| Estonia<br>0.05   |           | 38        |
| Latvia<br>0.06    |           | 29        |
| Lithuania<br>0.11 |           | 34        |
| Czech Rep. 0.55   |           | 60        |
| Poland<br>1.38    |           | 40        |
| Hungary<br>0.46   |           | 51        |

V.Katkus, R.Lazutka. The Establishment of the Pension Funds System in the Baltic States.

| Greece<br>0.66 | 70  |
|----------------|-----|
| Portugal       | 75  |
| 0.67           |     |
| EU 15          | 102 |
| 34.53          |     |
| USA            | 149 |
| 36.38          |     |
| OECD 30        | 100 |
| 100            |     |
|                |     |

Source: Paul Schreyer and Francette Koechlin (2001). Purchasing power parities 1999 benchmark results. OECD Statistics Directorate. P 3.

The establishment of the pension funds in Baltic States we can characterised as a pension system reform in the small open economy with low incomes.

## 16. Legal Background for Pension Reform

The Baltic countries have a unique historic experience as compared with other candidate states to join the European Union. Before 1940 they had hardly began creating social welfare schemes. Later, during 50 years of occupation these countries were under the social security system of the Soviet Union. After Lithuania declared its independence in 1990 and Latvia and Estonia - in 1991, the Baltic countries had to create independent social welfare systems in extremely complicated conditions of creating state institutions and separating the economy from the decaying Soviet system.

It is not surprising that for several more years social payments were paid in accordance with temporary or/and frequently changing legal acts or government resolutions. In the sphere of pensions it was primarily necessary to ensure their financing and thus in 1990-1991 all the countries started creating social insurance (or Social) funds separated from the state budget.<sup>1</sup> Therefore, already during the first years of independence under the conditions of the GDP decline by double-figure percentage figures and in some years even a three-figure inflation rate the main concern of the Governments was to amortize the decline of the pensioners' life at least so as they would be ensured against severe poverty. It was not the right time for systematic pension reforms.

On the other hand, the drastic decline of the economy during the first years of its reformation on the market basis very soon gave to understand that it would be very difficult to finance the inherited procedure of pension payment. As is well known, despite the inefficient economy, the pension schemes in the Soviet Union were relatively charitable.<sup>2</sup> It was characterized by the low pension age (55 years for women and 60 years for men) with wide exceptions of early retirement for the representatives of certain professions. Due to universal employment and mild work record requirements practically all senior citizens were entitled to pensions. Pensions were paid in case of continuing work after reaching the retirement age and

<sup>&</sup>lt;sup>1</sup> The process of pension systems adaptation to new conditions is described in more detail in Müller,K. Old-Age

Security in the Baltics: Legacy, Early Reforms and Recent Trends. No. 7/01

The formation factors of the Soviet social welfare system are described in detail in Rimlinger, G.V. Welfare Policy and Industrialization in Europe, America, and Russia. 1971.

as the latter was rather low, the payment of pensions to the working pensioners was quite common.<sup>3</sup> It is clear that there were no private pensions in the Baltic countries as well as in the whole Soviet Union, and thus they were also started to be planned only after reaching stable macroeconomic showing.

More systematic pension reforms were started in the middle of the last decade of the last century. In Lithuania it was pension laws that took effect from 1995 and the concept of Pension System Reform drawn later (in 2000), in Estonia – Conceptual framework for Pension Reform approved in 1997, in Latvia – a very specific pension system that was started in 1996. In all the countries these or those official documents promised to create three-Pillar pension systems.

Following the aforementioned Conceptual framework for Pension Reform, **in Estonia** the following three pension Pillars were planned:

Pillar I – state pension insurance.

Pillar II – compulsory pension insurance.

Pillar III – voluntary pension insurance.

According to this concept Pension Pillar I (state pension insurance) was started to be implemented after passing the Social Tax Act that took effect on 1 January 1999 and the State Pension Insurance Act that took effect on 1 April 2000 and that replaced the State Payment Act effective since 1993. The Funded Pensions Act took effect on 1 October 2001. It provided for the activity of pension funds of Pension Pillars II and III. Pension Pillar II (mandatory insurance) was started to be created from 1 July 2002 after the collecting of payments for this pension Pillar was initiated.

Private voluntary pensions of Pillar III could already be funded since 1 August 1998. Before 1 October 2001 these pensions were regulated by the Pension Funds Act. Since 1 October 2001 they are regulated by the same Funded Pensions Act as the pensions of Pillar II.

The State Pensions Act that took effect in Latvia on 1 January 1996 provided for NDC (Notional Defined Contributions) pensions of Pillar I. The pension system is also regulated by the 1997 State Social Insurance Act. In July 2001 the State Funded Pensions Act took effect and this was the beginning of the Pillar II pension creation. Pension Pillar III in Latvia was started in July 1998 after passing the Law on Private Pension Funds in June 1997 and creating the regulatory infrastructure.

**In Lithuania,** the social insurance and other state pension reform began on 1 January 1995 after starting to implement the State Social Insurance Pensions Act and the State Pensions Act. These acts regulate the pensions of Pillar I. Social insurance pensions are paid to the

Lithuanian Banking, Insurance and Finance Institute

<sup>&</sup>lt;sup>3</sup> For the information on what social security system was inherited after the collapse of the Soviet Union see Vorin, M. Social security in central and eastern European countries: Continuity and change. // International Social Security Review. Vol. 46, 1/93.

insured in cases of old age, disability and widowhood. The State Pensions Act regulates pensions to some state servant groups (soldiers, policemen and others) and social pensions to some groups of residents who are not socially insured.

On 26 April 2000, the Government of Lithuania approved the concept of the Pension System Reform. It provides for the pension system comprising three Pillars. The pension system of the second Pillar is not yet started to be created in Lithuania. Until the autumn of 2002 no projects of laws were considered in the Parliament. Private voluntary funded pensions of the third Pillar are regulated by the Pension Fund Act that took effect at the beginning of 2001. However on its grounds before the autumn of 2002 no pension funds were established either. Private pension schemes are being gradually created in life insurance companies in accordance with legal acts regulating life insurance and personal income taxes.

At the first sight both the adaptation of the economy to the market system and general pension reformation conditions and directions are similar in all the Baltic countries. However more attentive consideration may disclose a number of details that are different in the pension systems and their reformation in these countries.

## 17. Conditions for Demographic Pension System Development

The age structure of the residents of the Baltic countries is similar to that of the most European countries. The dependence rate (the ratio of the number of old-age people and the number of employable-age residents) in Latvia and Estonia is about 22.5 percent and is close to that of Northern and Central European countries (see e.g. in Table 51). In Lithuania this rate is a little more favourable -20.2 percent. Only Poland shows still a better figure (17.7 percent).

The position of Lithuania is more advantageous also in the sense that the proportion of children is higher by two percentage points and that of old-age people is lower by 1.5 percentage points as compared to the northern neighbours. It is interesting that a bigger share of old-age people in the number of the country's residents in Latvia and Estonia is not the result of the longer life expectancy of the residents of those countries. On the contrary, the estimated life expectancy calculated for the born persons in Lithuania is 2 years longer both for men and women (Table 52).

Population by major age groups¹

(per cent distribution)

Population at age (years) 65+ / 15-64 -14 15-44 45-64 65 +17.7 Estonia 42.3 24.8 15.2 22.742.8 Latvia 17.3 24.7 15.2 22.5 19.2 45.0 22.2 13.6 20.2 Lithuania 42.7 25.5 Hungary 17.1 14.6 21.4 12.1 19.6 45.5 22.8 17.7 Poland Denmark 18.4 41.2 25.6 14.8 22.2 United Kingdom 19.0 42.1 23.3 15.6 23.9 Germany 16.0 42.7 25.5 15.8 23.2 42.6 25.0 **Italy** 14.4 18.0 26.6

Statistical Yearbook of Lithuania 2001.

<sup>&</sup>lt;sup>1</sup> The Baltic countries 1 January 2001, the other countries 1 January 2000 or latest available data.

However, even the estimated life expectancy index of the residents of Lithuania is closer to those of the post-communist Central European countries. At the same time it lags behind the indices of Northern and Western European countries. Especially big difference is seen between the life expectancy of men. This difference is to a great extent conditioned by the high death-rate among men of young age.

Life expectancy at birth

Table 52

|                | Life expectancy of birth by sex, years |       |         |
|----------------|--|-------|---------|
|                | Year                                   | Males | females |
| Estonia        | 1999                                   | 65.4  | 76.1    |
| Latvia         | 2000                                   | 64.9  | 76.0    |
| Lithuania      | 2000                                   | 67.6  | 77.9    |
| Czech Republic | 1999                                   | 71.4  | 78.1    |
| Poland         | 1999                                   | 68.8  | 77.5    |
| Slovakia       | 1999                                   | 69.0  | 77.0    |
| Hungary        | 1999                                   | 66.3  | 75.1    |
| Sweden         | 1999                                   | 77.1  | 81.9    |
| Finland        | 1999                                   | 73.8  | 81.0    |
| Germany        | 1998                                   | 74.5  | 80.5    |
| France         | 1999                                   | 74.9  | 82.3    |

Based on Statistical Yearbooks and Monthly Bulletins of Estonia, Latvia and Lithuania

The estimated life expectancy of the residents of the Baltic countries calculated not for the date of birth but for the age at which people normally retire is also different. This index in Lithuania is also different from the Baltic neighbours (Table 53). Men having reached the age of 60 years in Lithuania still live for approximately 1.7 years and women – even 2 years longer than in Estonia. The showings of Latvia are between those of these two countries.

However, if compare the estimated life expectancy of older people of the Baltic countries with Western countries, one can also notice certain differences although they are not so significant as the life expectancy calculated for the date of birth. In the Baltic countries older (60-year-old) men live about 3.5 years and women – about 2.5 years less than the residents of OECD countries (Table 2-3).

Life expectancy for older people

At 60 At 65 Women Men Men Women Estonia 75.3 80.8 77.6 81.9 Latvia 75.8 81.3 76.9 82.6 Lithuania 77.0 82.8 Unweighted average for Baltic countries 76.0 81.6 77.3 82.3 79.5 Unweighted average for 9 OECD countries\* 83.9 80.8 84.7 Difference (Baltics-OECD countries) -3.5 -2.3

Casey B., Pension policy and pension reform// presentation at the workshop "Labour market and social policies in the Baltic States: an OECD policy review. Palanga, 5 July 2002.<sup>4</sup>

Lithuanian Banking, Insurance and Finance Institute

<sup>\*</sup>Canada, Finland, Germany, Italy, Japan, the Netherlands, Sweden, the UK and the USA.

<sup>&</sup>lt;sup>4</sup> Mr. Bernard Casey is a Senior Research Fellow, London School of Economics

The demographic data presented above show that although the Baltic countries are different among themselves, they all together also differ from Western European countries. Due to more difficult living conditions and less efficient health care the life expectancy of their residents is lower. The proportion of older people in their total number is also lower. Apart from the life expectancy, the latter index is also influenced by a little higher birth-rate before the declaration of independence in 1990-1991.

**Total fertility rate in selected countries** 

|                | Total fertility rate |      |  |
|----------------|----------------------|------|--|
| Estonia        | 2001                 | 1.38 |  |
| Latvia         | 2001                 | 1.24 |  |
| Lithuania      | 2000                 | 1.27 |  |
| Czech Republic | 1999                 | 1.13 |  |
| Poland         | 1999                 | 1.37 |  |
| Slovakia       | 1999                 | 1.33 |  |
| Hungary        | 1999                 | 1.29 |  |
| Sweden         | 1999                 | 1.50 |  |
| Finland        | 1999                 | 1.74 |  |
| Germany        | 1999                 | 1.36 |  |
| France         | 1999                 | 1.24 |  |
| Italy          | 1999                 | 1.19 |  |

Statistical Yearbook of Lithuania 2002.

However the fertility rate in the Baltic countries has drastically dropped since 1990. The total fertility rate has gone down from 2 to 1.3 (Table 55). It has reached a lower level than in the majority of Western European countries. This will cause negative consequences for the pension system as when this scarce generation of children grow up and come to the labour market, the number of people financing pension systems will decrease.

**Total fertility rate in the Baltic countries** 

|      | Estonia | Latvia | Lithuania |
|------|---------|--------|-----------|
| 1990 | 2.05    | 2.02   | 2.02      |
| 1995 | 1.32    | 1.25   | 1.49      |
| 2001 | 1.38    | 1.24   | 1.27      |

Another factor negatively influencing pension systems is emigration. Together with the birth-rate decline mentioned above it is also the reason for the Baltic countries to have lost from 5 to 12 percent of residents during the last decade (Table 56). It is worth noting that in this aspect too the most advantageous situation is that of Lithuania. The major emigration part is not registered and thus its extent can be estimated indirectly by comparing the total number of residents between the censuses. Although there are no final data on the population census that would show the age structure of the emigrated, it is obvious that the majority of the emigrated are people of the employable age because the main reason for emigration is looking for a job in Western countries.

Table 56

Table 55

| Decrease in the number | of residents in | the Baltic countries | (thousands) |
|------------------------|-----------------|----------------------|-------------|
|------------------------|-----------------|----------------------|-------------|

|              |      | Change          |                     |  |
|--------------|------|-----------------|---------------------|--|
| Last Census* | 1989 | Absolute number | Percent, 1989 = 100 |  |

V.Katkus, R.Lazutka. The Establishment of the Pension Funds System in the Baltic States.

| Estonia   | 1 370.1 | 1 565.7 | -195.6 | -12 |
|-----------|---------|---------|--------|-----|
| Latvia    | 2 377.4 | 2 666.6 | -289.2 | -11 |
| Lithuania | 3 484.0 | 3 674.8 | -190.8 | -5  |

<sup>\*</sup> Estonia, Latvia – 2000, Lithuania – 2001.

On the grounds of the figures presented above it is possible to conclude that the demographic situation of the Baltic countries is close to that of Western European countries. Certain peculiarities (e.g. shorter life expectancy, higher birth-rate before 1990) imply that the ageing of the Baltic countries societies progresses a little later than in the majority of the EU countries. Among the Baltic countries the most advantageous situation is that of Lithuania. However drastic drop of birth-rate gives concern about the generation that will work in the future and finance pension systems in one way or another becoming still scarcer. The long-term forecasts for the influence of the population number, its structure and these figures on pension systems are unfavourable for all the Baltic countries.<sup>5</sup>

On the other hand, demographic forecasts for these countries can hardly be reliable. They are calculated on the basis of birth-rate, death-rate and migration premises. The former two factors being natural are considered more stable and migration flows are strongly and rapidly influenced by political and economic factors. It was namely migration that was the most significant for the number of residents of the Baltic countries during the last decade. At least in Latvia and Estonia the number of residents decreased more due to emigration than due the birth-rate decline although the latter was also unusually rapid. That peculiarity of the last decade demographic development of the Baltic countries must be considered on the basis of population number forecasts when planning pension reforms.

## 18. Changes in the Number of Pensioners

Demographic development unfavourable for pension systems was one of the arguments helping to decide upon increasing the pension age in all the Baltic countries. Another argument was the already mentioned lower pension age as compared with the majority of Western countries that remained from the Soviet period (Table 57).

Table 57
The Law-defined age that gives right to receive old age pension¹ (years)

|                    | Men | Women |
|--------------------|-----|-------|
| Austria            | 65  | 60    |
| Belgium            | 65  | 61    |
| Bulgaria           | 60  | 55    |
| Denmark            | 67  | 67    |
| Czech Republic     | 60  | 55    |
| France             | 60  | 60    |
| Greece             | 65  | 65    |
| Italy              | 64  | 59    |
| Ireland            | 66  | 66    |
| Russian Federation | 60  | 55    |
| United Kingdom     | 65  | 60    |
| Netherlands        | 65  | 65    |
| Norway             | 67  | 67    |
| Poland             | 65  | 60    |
| Portugal           | 65  | 65    |

<sup>&</sup>lt;sup>5</sup> E.g. see Schiff, J. Pensions reform in the Baltics: Issues and Prospects. IMF. 2000.

Lithuanian Banking, Insurance and Finance Institute

| Slovakia | 60 | 55 |  |
|----------|----|----|--|
| Finland  | 65 | 65 |  |
| Spain    | 65 | 65 |  |
| Hungary  | 60 | 56 |  |
| Germany  | 65 | 65 |  |
| Sweden   | 65 | 65 |  |

<sup>&</sup>lt;sup>1</sup> The Baltic countries - 1 January 2001, Belarus, Czech Republic, Poland, Russian Federation - 1999, the European Union countries - 1 January 1998, Norway - 1995, other countries - 1998.

Estonia was the first of the Baltic countries to start increasing the pension age from 1 April 1993. In Lithuania, such a decision was started to be implemented from the beginning of 1995 and from the beginning of 2001 the increase of the pension age was still accelerated. In Latvia, the pension age for women was started to be increased from 1996 and for men – from 2000. Besides, in Latvia from 2005 it is planned to abolish the retirement earlier than the normal pension age (Table 3-2).

According to the legally established conditions the increased pension age in the Baltic countries will not reach the legal pension age applicable in the majority of Western countries. However, taking into consideration the shorter life expectancy in the Baltic countries, such an increase is quite significant.

The normal age for old-age pensions (men/women)

Table 58

|           | 1990    | 2002      | Target                    | Legislated |
|-----------|---------|-----------|---------------------------|------------|
| Estonia   | 60 / 55 | 63 / 58.5 | 63 by 2001 / 63 by 2016   | 1993       |
| Latvia    | 60 / 55 | 61.5 / 59 | 62 by 2003 / 62 by 2008   | 1995*      |
| Lithuania | 60 / 55 | 62 / 58   | 62.5 by 2003 / 60 by 2006 | 1994; 2000 |

<sup>•</sup> started in 2000 for men and in 1996 for women *Casey B.,2002*.

Two of the three Baltic countries – Estonia and Lithuania – having started to increase the pension age earlier from 1995 to 2001 have managed to reduce the number of old-age pensioners (Table 59).

The conditions for receiving old-age pensions in Lithuania became stricter from 1995 after introducing the requirements of minimal and compulsory insurance period. The minimal insurance period of 15 years grants the right only to a partial pension. The compulsory period requirement entitling to the whole pension was started to be gradually increased up to 30 years. In Estonia and Latvia the period requirements remain low – 15 and 10 years respectively. Even in Lithuania the insurance period requirements will have impact on the number of pensioners only in the future. During the initial reformation period persons of the pension age usually have a sufficient work record from the Soviet times, which is taken into account as the insurance period of the new system. However, in the future due to the drastically reduced number of the employed and insured (as will be illustrated below) the universality of the right to old-age pensions will be highly endangered.<sup>6</sup>

Table 59 Number of pensioners (at the end of the year; in thsd of population) (thous)

|      | Total   |        |           | Old-age |        |           |
|------|---------|--------|-----------|---------|--------|-----------|
|      | Estonia | Latvia | Lithuania | Estonia | Latvia | Lithuania |
| 1990 | 360.5   | 609.8  | 827.7     | 287.5   | 487.4  | 656.2     |
| 1995 | 376.2   | 666.0  | 853.8     | 302.1   | 497.0  | 656.8     |

<sup>&</sup>lt;sup>6</sup> For more information see Lazutka, R. Phare. 1998.

Lithuanian Banking, Insurance and Finance Institute

| 2001 | 366.7 | 630.4 | 1057.7 | 297.4 | 504.8 | 636.9 |
|------|-------|-------|--------|-------|-------|-------|

In Lithuania, the share of old-age pensioners in the total number decreased in 2001 and reached the level of 1990, and now is the lowest of all the three countries (only 17.6 percent). In Estonia and Latvia the share of pensioners in the total population number has increased and now makes about 22 percent (Table 60). In Latvia, due to the later and slower increase of the pension age the absolute number of pensioners has also increased (Table 59).

Table 60 Share of old-age pensions recipients in total number of population (percent)

|      | Old-age                  |      |      |  |  |
|------|--------------------------|------|------|--|--|
|      | Estonia Latvia Lithuania |      |      |  |  |
| 1990 | 18.3                     | 18.5 | 17.6 |  |  |
| 1995 | 20.5                     | 19.6 | 17.8 |  |  |
| 2001 | 22.2                     | 21.5 | 17.6 |  |  |

Two countries - Estonia and Latvia - reformed the disability pension system and in 2000-2001 managed to reduce the number of recipients of this kind of pension. In these countries during the last years the number of recipients of survivor's pensions has also decreased (Table 61).

Table 61 Number of disability and survivor's and widow's pensioners (thous)

|      | Disability |        |           | Survivor's |        |           |
|------|------------|--------|-----------|------------|--------|-----------|
|      | Estonia    | Latvia | Lithuania | Estonia    | Latvia | Lithuania |
| 1990 | 38.9       | 66.9   | 111.3     | 17.2       | 38.7   | 59.0      |
| 1995 | 52.3       | 103.4  | 139.2     | 15.8       | 38.4   | 55.3      |
| 2001 | 43.4*      | 83.2** | 181.1     | 15.7       | 36.2** | 239.7     |

<sup>\*</sup>incapacity for work

In Lithuania, the number of recipients of disability pensions has been changing the opposite direction. Unreformed old procedure of establishing disability, high unemployment rate and increase of the old-age pension age resulted in the increase of the number of disability pensioners from 111 to 181 thousand during the last decade. Besides, Lithuania unlike the other two countries as we shall see below has not introduced the early pension scheme either.

Table 62 Number of Disabi<u>l</u>ity Pensions in the Baltic Countries (for a thousand of population)

|      | E     | La     | Li   |
|------|-------|--------|------|
| 1990 | 24.8  | 25.1   | 30.0 |
| 1995 | 35.4  | 40.9   | 37.4 |
| 2001 | 32.5* | 35.0** | 49.0 |

<sup>\*</sup>incapacity for work

The already mentioned tendencies for changes of the number of disability pensions resulted in the fact that for a thousand inhabitants in Estonia and Latvia only 33-35 are pensioners while in Lithuania – almost 50 (Table 62). Every year in Lithuania the number of disability

<sup>\*\*2000</sup> 

<sup>\*\*2000</sup> 

pension recipients is almost thrice as big as in the neighbouring countries, and this number is rapidly growing (Table 63).

Table 63 Number of granted disability pensions during the reference year (thous)

| ٠, |      | <u> </u> |        |           |
|----|------|----------|--------|-----------|
|    |      | Estonia  | Latvia | Lithuania |
|    | 1995 | 6.1      | 8.5    | 13.0      |
|    | 1998 | 6.5      | 6.2    | 14.8      |
|    | 2000 | 6.0      | 5.6    | 17.1      |

In Lithuania, in contrast to Estonia and Latvia, the number of widow's pension recipients has also greatly increased. More specifically, in 1995 instead of the survivor's pension widow's and orphan's pensions were introduced and in 1997 the rights to them were even expanded. It determined the fact that in 2001 the total number of recipients of widow's and orphan's pensions and survivor's pensions granted before the 1995 reform amounted up to almost 240 thousand (Table 61).

Namely because of the increase in the number of disability and widowhood pensions the total number of granted pensions in Lithuania grew significantly – from 828 thousand in 1990 to 1058 thousand (Table 59). Starting from 2000-2001 as compared to 1995, Estonia and Latvia reduced also the total number of pension recipients of all social insurance kinds. This figure is often paid attention to. It is worth remembering that some pensions are not equal to others. Widow's pensions in Lithuania make only 20 percent of the deceased spouse's pension and thus such an impressive increase of the number of pensioners is much less significant than the funds proportionally raised for them. As we shall see below, the differences in the proportion of pensioners and the insured in the three countries strongly depend on the kinds of pensions being compared.

Of all the 62 thousand pensions granted in Lithuania in 2000 only 24.5 thousand were granted to persons who had reached the pension age. All the rest were granted in cases of disability and widowhood.

On the other hand, of all the three Baltic countries only Lithuania refused early retirement pension schemes remaining from the Soviet pension system to those who worked in onerous and hazardous conditions. Lithuania liquidated this scheme while reforming the pension system in 1995. Estonia and Latvia provided for the possibility of early retirement in their new legal acts: in Estonia – three years and in Latvia – two years before the normal pension age (Table 64).

Table 64
Early retirement schemes

| Estonia   | 3 years early, reduced by 4.8 percent per annum (14.4 percent for full |
|-----------|--|
|           | three years). Legislated 1998.   |
| Latvia    | Legislated 1995, 2 years early, amended in 2000 to 58 for women and    |
|           | 60 for men.*   |
| Lithuania | No   |
|           |  |

<sup>\*</sup>According to NDC formula (smaller "accumulated capital" and longer retirement period reduce the pension. In case of the minimal pension only 80 percent of the usual minimal pension are paid if the person retires earlier)

Casey B., 2002.

<sup>7</sup> Schiff, J. Pensions reform in the Baltics: Issues and Prospects. IMF. 2000.

### 19. Pension Resources

All the Baltic countries are quite "economical" for account of pensioners. However, each of them allocates different funds to pensions. Of the three countries Latvia is clearly outstanding as its expenses for all social insurance pensions make over 10 percent of GDP. This figure almost reaches the average of the EU countries. The pension expenses in Estonia and Lithuania are much lower – over 7 and 6 percent of GDP respectively. Each of the three countries spends about two percent of GDP for disability, widow's and survivor's pensions. Thus, old-age pensions in Latvia "cost" over 8 percent, in Estonia – over 6 and in Lithuania – over 5 percent of GDP (Table 65). The main reason for bigger pension expenditure in Latvia as we shall see below is bigger pensions in this country.

Table 65
Expenditures for social insurance pensions (percent of GDP)

|      | Estonia |         | Latvia |         | Lithuania |         | EU-15* |         |
|------|---------|---------|--------|---------|-----------|---------|--------|---------|
|      | All     | Old-age | All    | Old-age | All       | Old-age | All    | Old-age |
| 1995 | 7.1     | 5.8     | 10.2   | 7.7     | 6.0       | 4.7     | •••    |         |
| 1996 |         | •••     | 10.6   | 8.2     | 6.1       | 4.7     | •••    |         |
| 1997 | 7.3     | 6.0     | 10.4   | 8.2     | 6.4       | 4.9     |        |         |
| 1998 | 7.1     | 5.9     | 11.2   | 8.8     | 7.0       | 5.3     | •••    |         |
| 1999 | 8.5     | 6.9     | 12.0   | 9.4     | 7.6       | 5.7     | 12.7   | 9.5     |
| 2000 | 7.6     | 6.4     | 10.3   | 8.3     | 7.2       | 5.4     |        |         |
| 2001 | 7.7     | 6.3     | 9.2    | 7.5     | 6.7       | 4.9     |        |         |

Lazutka, R. calculations based on Statistical Yearbooks and Monthly Bulletins of Estonia, Latvia and Lithuania \*Expenditure on pensions in Europe, (http://europa.eu.int/comm/eurostat/)

All the three countries finance social insurance pensions by earmarked contributions to social insurance funds. However, contribution rates, proportions of their distribution between the employer and the employee and contributions from the income of self-employed persons are different.

In Estonia, social contributions are paid by all gainfully employed persons. The employers of hired employees pay 20 percent of the salary of every employee. These contributions are calculated without applying ceiling and bottom income limits. No contributions were established for employees before the middle of 2002. For the self-employed the maximum income from which contributions are calculated makes 15 minimum salaries. The same limit is applied also to calculating the amount of pensions for the self-employed. Minimum income from which contributions are calculated for part-time workers and self-employed is EEK 700 (in 2002).

After introducing Pillar II of pensions in Estonia from the middle of 2002, the accounts of its participants acquired 4 percentage points each of the contributions devoted to social insurance pensions. Two more additional percent of the salary are paid by employees themselves. Apart from 20 percent contributions for pensions in Estonia 13 percent of the salary amount are paid for health and sickness allowance insurance as social insurance contributions.

In Latvia the amount of contributions has been changing annually. In 1998-1999, contributions for all social insurance were set at 37.09 percent of the salary. 28.09 percent were paid by the employer and 9 percent - by the employee. From 1 January 2000 the contribution was 36.9 percent (27.09+9), from 1 January 2001 – 35.09 percent (26.09+9).

There are ceiling limits of contributions applied. The maximum taxable annual income was LVL 14,000 in 1999 and LVL 15,000 in 2000.

The self-employed pay from the amount of their declared income according to their own choice but there are ceiling and bottom limits. The minimum limit of the contributions was established in 2000 but only for the self-employed. They are equal to such income that can ensure no less than 50 percent of the minimum pension (30 LVL in 2000) paying contributions for 32 years and retiring at the age of 62. In 2000, the minimum taxable annual income for the self-employed was set at LVL 540 and the maximum one – at LVL 15,000.

In Latvia, the total share of 30.86 percent of the salary is allocated to pensions. For disability pensions it is 3.76 percent of the salary. For old-age and survivor's pensions it is 27.1 percent. Of them from 1 January 2002 2 percentage points are transferred to Pillar II of pensions. The aforementioned contribution rates are used for financing pensions for present pensioners. However, for old-age pensions "for the notional accumulation of the pension capital" the presently employed are charged 20 percent contribution of the salary.

Table 66
Social insurance contributions from wages for pensions in the Baltic States 2002
(percent of wages)

| Estonia |        | Latvia | 8      | Lithuania |        |
|---------|--------|--------|--------|-----------|--------|
| PAYG    | Funded | PAYG   | Funded | PAYG      | Funded |
| 16      | 4+2    | 28.86  | 2      | 25        | -      |

In Lithuania, social insurance contributions for all social insurance branches make 34 percent of wages. Social health insurance is financed separately. The contribution of 25 percentage points is devoted to pensions. Social insurance contributions are paid from the whole amount of wages without applying either ceiling or floor limits. The ceiling limit for wages from which contributions were paid was introduced twice but due to insufficient funds for social insurance in both cases it had to be liquidated. Certain groups of the self-employed pay contributions of the fixed amount (50 percent of the basic pension) independent of income. Owners of individual firms pay contributions from the declared income to which ceiling and bottom limits are applied.

Thus, the contribution rates for pensions in the Baltic countries are very different (Table 66). The biggest contributions are collected by Latvian social insurance. In Estonia the contributions are the smallest. After in 2002 Estonia redirected 4 percentage points to the accumulative PAYG system, the contribution tariff for pensions in this country remains almost twice as low as in Latvia.

The Baltic countries chose different proportions of distributing social insurance contribution rates between the employer and the hired employee.

From 1991 Latvia set one percentage point of the contribution tariff for employees. Later as it has been mentioned it increased up to 9 percentage points. In Lithuania too, at the beginning of the social insurance system creation in 1990 the rate of 1 percentage point was set for employees (1 and 30 – for the employer) hoping that in the future the employee's part will gradually be increased and that of the employer be reduced.<sup>8</sup>

Lithuanian Banking, Insurance and Finance Institute

81

<sup>&</sup>lt;sup>8</sup> Different ratios of contribution rate distribution between the employer and the employee do not have different economic contents. It is important how much the employer spends on hiring employees by paying them wages and social insurance contributions extra and how much "take-home" (after deducting taxes and social insurance

However, it appeared that changing the proportions of distributing contributions between the employer and the employee within the presently active system is not only a technical solution. Increasing the employee's contribution part for account of reducing the employer's contribution part causes a danger that the employer would not increase the nominal salary of the employee by the part of their reduced contribution and real income of the latter would decrease.

Especially in the Baltic countries where employees have no strong associations and trade unions are weak, there is a risk that the employer would keep the part of the reduced social insurance contribution tariff to themselves. Due to that reason in Lithuania unlike Latvia no attempts to change the social insurance tariff between the employer and the employee were made. Only on the social insurance system having faced large deficit and the contribution increase becoming inevitable, in 2000 it was increased for employees from 1 to 3 percent. True, after introducing an additional kind of insurance — injury at work — the social insurance contribution was also increased for employers from 30 to 31 percent the same year.

In Estonia, contributions for employees were not introduced until 2002 when in the process of creating Pillar II of pensions employees were required to pay 2 percent of wages in addition to the employer's contribution to the new accumulative pension scheme.

The highest of all the compared countries contribution tariff for pensions in Latvia matches the biggest pension resources in this country shown above as a percentage proportion of GDP. However the amount of pension resources is conditioned not only by contribution tariffs but also by the amount of wages from which contributions are calculated and the number of recipients of those wages.

The economy structure of the Baltic countries is characterized by a comparatively small proportion of work income in the gross domestic product. In Lithuania wages together with social insurance make only 41 percent, in Latvia – about 48 percent. Only in Estonia work income makes more than a half of GDP – about 54 percent (Table 67).

Table 67 Share of GDP paid for employees and social insurance (year 1999, %)

|                                 | ces and social | misur unice ( | Jean 12229 70 |
|---------------------------------|----------------|---------------|---------------|
|                                 | Estonia        | Latvia        | Lithuania*    |
| Compensation of employees:      | 53.7           | 47.8          | 41.2          |
| wages and salaries              | 40.7           | 38.1          | 32.6          |
| employers' social contributions | 13.0           | 9.7           | 8.6           |

<sup>\*</sup> year 2000.

Statistical Yearbooks of Estonia, Latvia and Lithuania

This figure is very important for financing pensions. When the proportion of work income in GDP is bigger, even in case of a lower contribution rate more social insurance funds are collected. We can clearly see it by comparing the social insurance finances of Lithuania and Estonia. The contribution rate, as we have seen before in Estonia, is five percentage points or one fifth lower but the pension financing makes even a larger share of GDP than in Lithuania. On the other hand as we shall see below, in Estonia pensions are a little lower as compared with wages than in Lithuania because in Estonia wages are higher than in Lithuania (the share of GDP made by wages is larger).

contributions) pay is received by the employee. These amounts remaining unchanged, both the employer and the employee should be disinterested in the proportion of social insurance contribution distributed between them. However, deducting contributions from the employee and the employer has psychological meaning – it is perceived more clearly that (and how much) the social insurance system costs.

The low share of wages in GDP is influenced by several factors. First, low organization level of employees does not allow negotiating higher wages by way of collective negotiation. Second, a similar factor pressing wages down is high unemployment rate. Third, in the Baltic countries, especially in Lithuania, self-employment work form has greatly expanded (Table 68). People employed in it gain the so-called statistically "mixed" income. Pension financing is negatively influenced by that as the self-employed are either not socially insured or are insured but pay significantly smaller contributions than hired employees. On the other hand, they are either not entitled to pension (if case they are not insured) or their future pension is very small, which will not ensure them against poverty.

Workforce Structure in Lithuania in 2000 (percent, workforce proportion is 100 percent)

| Workforce structure                         | Per cent     |
|---|--------------|
| Hired<br>Self employed, their family        | 66.9         |
| members working as assistants<br>Unemployed | 17.2<br>15.9 |
| Total                                       | 100.0        |

Pension financing possibilities are negatively influenced by the economic activity and employment of the population that has drastically decreased and is still going down. These figures are especially low in Latvia and a little higher in Estonia (Table 69).

**Economic status of population** 

Estonia Latvia Lithuania Labour Emp Unempl Labour **Emplo** Unem Labour Emp Unem force oyment force force loym yment ploym loym ploym rate\*\*\* participatio ent participa rate\*\* participa ent ent ent rate\* rate\*\* rate\* rate\*\* n rate tion rate tion rate \* percent\* percent\* percent\* 1990 75.5 75.0 0.6 65.5 65.5 ... ••• 1995 72.6 9,8 18.9 66.9 55.2 17.1 ... 9.7 59.7 1997 65.1 58.8 51.1 14.4 61.5 52.8 14.1 51.2 2000 63.9 55.1 13.7 56.8 48.5 14.6 60.4 15.4

The unemployment rate, on the contrary, has greatly grown. As is well known, in the Baltic countries as in all the Soviet Union the population was universally employed. When reforming the economy, while the economy structure was radically reformed, the structural unemployment reached 14-15 percent (a little lower in Estonia) (Table 70). Even with the development of the economy the unemployment is practically not decreasing as its growth results from the labour productivity increase.

Table 70

Table 68

Table 69

# **Unemployment rate (percent)**

<sup>\*</sup>or activity rate – labour force (employed and unemployed) in working age population

<sup>\*\*</sup>the share of employed in the working age population

<sup>\*\*\*</sup>the share of the unemployed labour force

V.Katkus, R.Lazutka. The Establishment of the Pension Funds System in the Baltic States.

|             | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 |
|-------------|------|------|------|------|------|------|------|
| Estonia (1) | 9.8  | 10.0 | 9.8  | 9.9  | 12.3 | 13.7 | 12.6 |
|             |      |      |      |      |      |      | 6.5  |
| Latvia (1)  | 18.9 | 18.3 | 14.4 | 13.8 | 14.2 | 14.5 | 13.1 |
| (2)         |      | 7.1  | 6.7  | 8.8  | 9.1  | 7.8  | 7.9  |
| Lithuania   | 17.1 | 16.4 | 14.1 | 13.3 | 14.1 | 15.4 | 17.0 |
|             | 6.1  | 7.1  | 5.9  | 6.4  | 8.4  | 11.5 | 12.3 |

Latvia: Soc. report 2000. P.12

- (1) ILO definition
- (2) Registered

1900

1500

1300

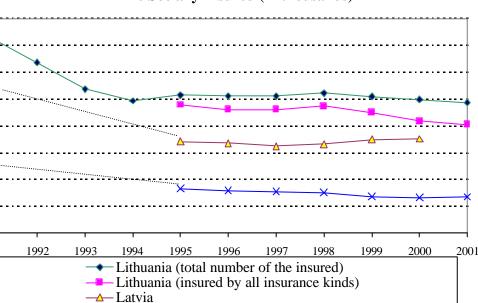
1100

700

300

The changes in the labour markets of the Baltic countries also determined the number of the socially insured going down. Especially rapid decrease was noticed during the first years of the economy transition to the market system (1990-1994). Later the number of the insured became more stable. In Latvia, it even started increasing after 1997, in Estonia it remains at the low position for the last three years, and in Lithuania unfortunately it has started decreasing again since 1999 (Chart 1).

The Socially Insured (in thousands)



Source: SSIF data 1997. \*source: Social report 2000

The Baltic countries as it was shown above took steps that limited the increase in the number of pensioners and in the majority of cases before 2000 they succeeded in reducing this number. However, unfavourable changes in the labour market determined the increase of the dependency rate (of the proportion of pensioners and the employed) in all the countries. It was especially rapid in 1990-1995 but even later its growth could not be fully stopped (Table 71).

-X Estonia (insured employees)

**Changes of the Dependency Rate in the Baltic Countries** 

| Estonia  | Estonia |   |         | Latvia  |   |          | Lithuania   |   |  |
|----------|---------|---|---------|---------|---|----------|-------------|---|--|
| Employed | Pension | % | Employe | Pension | % | Employed | Pensioners* | % |  |
|          | ers*    |   | d       | ers*    |   |          |             |   |  |

Table 71

Chart 1

V.Katkus, R.Lazutka. The Establishment of the Pension Funds System in the Baltic States.

| 1990 | 826.4 | 326.4 | 39.5 | 1408.7 | 554.3 | 39.3 | 1852.7 | 767.5 | 41.4 |
|------|-------|-------|------|--------|-------|------|--------|-------|------|
| 1995 | 647   | 354.4 | 54.8 | 1045.6 | 600.4 | 57.4 | 1643.6 | 796.0 | 48.4 |
| 1997 | 635.2 | 348.7 | 54.9 | 1036.8 | 605.7 | 58.4 | 1669.2 | 803.2 | 48.1 |
| 2000 | 592.1 | 351.1 | 59.3 | 1037.9 | 597.0 | 57.5 | 1586.0 | 818.1 | 51.6 |
| 2001 |       | 340.8 |      | 1037.0 |       |      | 1521.8 | 818.0 | 53.8 |

<sup>\*</sup>old-age and invalidity

It is interesting that in Lithuania the proportion of the number of old-age and disability pensioners and the number of the employed is the lowest (it made 53.8 percent in 2001) as compared with Estonia (59.3 percent in 2000) and Latvia (57.5 percent in 2000 m.). <sup>9</sup> It is despite the rapid growth of the number of disability pensioners in Lithuania during the last decade. The advantage of Lithuania is determined by the less significant decrease of the number of the employed within ten years in spite of the higher unemployment rate in Lithuania.

The determinant that worsened the proportion of the number of pensioners and the number of the employed in Latvia and Estonia was a more significant emigration from these countries.

The dependency rate discussed above is calculated on the basis of the number of the employed that is estimated by the labour market research. However, some part of the employed population is not insured for pensions because they are included in certain self-employed groups not obligatorily insured or avoid the insurance by breaching the law. This is why the so-called "system dependency ratio" calculated by comparing the number of pensioners with the number of the insured for pensions is important. The system dependence ratio is much higher than the dependency rate presented above. In Lithuania it is ten points higher and in Latvia – only two points. This proves the imperfection of the labour market and social insurance system in Lithuania – a big part of the actually working people avoid social insurance and do not contribute to the pension financing.

#### 20. Pension Amount

While reforming pension systems all the three countries introduced new pension formulas that provide for the dependence of the pension amount on social insurance contributions or amount of wages and the time of paying insurance contributions (insurance period). Nevertheless, pension formulas are quite different.

**In Estonia** the old-age pension consists of three components: the base part, the part depending on the insurance period and the so-called insurance part. The base part is equal for all pensioners.

The period part is calculated on the basis of the insurance period starting from 31 December 1998. This showing comprises all the period of the paid work for which the employer paid mandatory social contributions.

<sup>&</sup>lt;sup>9</sup> Quite often when calculating the dependence rate the number of the employed is compared with the total number of pensioners (e.g. Schiff, J. Pensions reform in the Baltics: Issues and Prospects. IMF. 2000., State Social Insurance 2000: Statistical Data. The Board of the State Social Insurance Fund.2001.). However in Lithuania from 1997 all widows and widowers are paid widow's pensions and their number is far bigger than in the neighbouring countries. Widow's pensions are most frequently paid as second pensions to the recipients of old-age or disability pensions. However the amount of these pensions makes only about 20 percent of the amount of old-age or disability pension amount. Due to the aforementioned reasons it is more expedient to calculate the dependence rate only for the number of old-age and disability pensioners.

<sup>&</sup>lt;sup>10</sup> The connection of the system dependence rate with other pension economic factors is illustrated in Augusztinovics M., Pension Systems and Reforms in the Transition economies // Un/ECE, Economic Survey of Europe, 1999, No. 3.

The insurance part includes the right to pension that was implemented after 1 January 1999. This part of the pension is established on the basis of the coefficient of the insurance part of the given person. The amount of the person's insurance part depends on how much social contribution funds went to their state pension insurance budget account. The incoming social contributions are accounted for every artificial year. Then the pension insurance part is calculated by summing annual coefficients. To calculate the annual coefficient the amount of the social contribution having gone to the person's account within the artificial year is divided by the average amount of the social contribution, which is recorded in the state pension insurance registry for every specific year.

Thus, the amount of the person's annual coefficients proves their right to the income of certain pension accounts, which is called "the insurance part". The time of the pension insurance (its period) does not have direct impact on the pension part (share).

According to the Estonian concept of the three-Pillar pension system, the future social insurance pension should guarantee 40-45 percent of net wages replacement rate.<sup>11</sup>

The three-part pension formula should eventually be replaced by the two-part formula when the persons having no work record since 1 December 1998 would retire. The maximum pension amount is not established.

Such a three-part pension formula in Estonia appeared because in 1992 due to the economic crisis in Estonia the "flat" social payment to pensioners was introduced. On 1 April 1993 it was replaced with the social insurance pension calculated by the formula where apart from the universal ("flat") base part the individual component depending on the work record was also introduced. That formula disregarded the former salary or the amount of the social contribution paid. When reforming the pension formula at the beginning of 1999 it was resolved to introduce also the insurance part depending on the paid social contribution but not to disregard the part depending on the work record for those who had that record before the beginning of the reform.

The indexation of the granted pensions in Estonia is planned annually according to the average consumer price index and social insurance fund, i.e. according to the financial capacity of the pension insurance budget. <sup>12</sup>

The state pension is considered to be the minimum pension guarantee in Estonia. It can be granted to permanent residents of Estonia:

- 1. having reached 63 years of age who have lived in Estonia for the last five years, took steps for receiving the pension, who lacked the mandatory 15-year work period for receiving the old-age pension and who do not receive any other state pension;
  - 2. who are permanently incapable to work and cannot receive disability pension;
  - 3. dependants whose support cannot receive the survivor's pension.

The amount of the state pension is annually determined by the parliament when approving the state budget.

**In Latvia,** the presently active social insurance pension scheme was implemented at the beginning of 1996. It is based on the so-called Notional Defined Contributions (NDC) principle and this is why it is so different from the PAYG pension schemes effective in most countries. Following the generations solidarity principle the state mandatory non-

<sup>&</sup>lt;sup>11</sup> Miuler, K., p.18

<sup>&</sup>lt;sup>12</sup> see Leppik 2000, according to Miuler.

accumulative scheme imitates the scheme of defined contributions. Social insurance contributions for the state old-age pension insurance (20 percent of wages) are recorded in the notional individual accounts. The change rate before the retirement and accumulated notional pension capital are calculated for the funds accounted in them. In reality contributions proper are used for paying the present pensions.

The pensions being paid before the beginning of the reform (until 1996) were not changed in accordance with the NDC scheme rules. However three categories of old-age pensioners will survive for a long time (2 e.g.) - persons to whom pensions are paid according to the old rules effective until 1996 and who do not participate in the new scheme; persons to whom pensions are paid according to the rules of the transition period, i.e. who have insurance records before and after the reform; and persons who participate only in the NDC scheme.

In the reformed system pensions are calculated by the formula described below.\_After the pension age is reached, the capital accumulated in the notional account is divided by the estimated life expectancy of the generation retiring then. It is not differentiated by sex and thus the solidarity between sexes is preserved, i.e. men whose life expectancy is lower partially finance the pensions of women who live longer.

The formula for calculating the annual pension in the NDC scheme

where,

P – the annual pension;

K – the accumulated notional pension capital of the insured pension calculated on the basis of the information concerning the amount of contributions paid to the individual account and the annual capital increase;

 $\,G-$  duration of the annuity payment (in years) based on the estimated life expectance equal for both sexes.

The pension amount is directly dependent on the actual retirement age of the person, the number of years of work and growth dynamics of wages from which contributions were accounted, which defines the change rate of the NDC pension capital. If a person retires at the age of 60, the replacement rate is no lower than 40 percent of pre-taxable income of the insured having normal work record (normal work career). If a person postpones the retirement until 65 years of age, the replacement rate will reach about 60 percent.

In Latvia social insurance pensions are considered taxable income. 25 percent income tax tariff is applied to income exceeding the non-taxable minimum. However, pensions are given high minimum of non-taxable income. In 2002 pensions were given the non-taxable minimum (178 EUR) five times as big as the non-taxable minimum applied to other taxable income.

Latvia, having set the lowest possible payment level gives minimum pension guarantees. The minimum amount of the guaranteed old-age pension before 2002 was the same as the amount of the state social security allowance (granted to the disabled e.g. because of inborn health disorders) <sup>13</sup>, i.e. starting from 1998 it made EUR 53 (at present it is 50 percent of the minimum salary). Starting from 2002 the amount of the guaranteed state old-age pension was

11

increased with regard to the individual insurance period multiplying the amount of the state social security allowance by the multiplier of 1.1, 1.2 or 1.3 corresponding to the work record period – less than 20 years or 30 years or more.

The socially insured person is entitled to the old-age pension if their insurance period is no less than 10 years. Persons who were not granted such a right through the social security system receive state guaranteed social security allowances. Allowances are paid only in case the person reaches the age of 5 years more than the set pension age. Allowances were introduced in 1996.

The person having reached the pension age can work and at the same time receive the pension. They continue paying contributions and additionally accumulate the notional pension capital. The return rate is calculated on the basis of the accumulated capital and when the person finally retires (ceases to work) the pension amount is recalculated on the basis of the newly accumulated capital.

In Latvia, before 2002 the consumer price index was used for indexation and starting from 2002 pensions are indexed on the basis of two variables – the consumer price index and contribution wage base, i.e. the base of wages from which social insurance contributions are paid.

**In Lithuania,** the formula of calculating old-age pensions consists of two differently calculated and indexed parts – the base pension and the additional pension part (B+P). The base pension rate established by the Government is connected with the Minimum Subsistence Level (MSL) and cannot be lower than 110% of MLL. Thus, it guarantees only minimum security level for pensioners.

To receive the whole base pension the person must have a so-called compulsory social insurance period. The compulsory social insurance period for men at the beginning of the reform was set at 25 years and for women it was 20 years but from 1995 this period is every year being prolonged for a year until it reaches 30 years. In case the mandatory insurance period of the person is insufficient, the base pension is proportionally reduced. Thus, the base pension for those having sufficient insurance period is almost "flat".

The additional pension part is calculated individually for every person taking into account the latter's insurance period and insured income gained during the insurance period. The formula for calculating the additional pension part:

$$P = 0.005 * S * K * D$$
,

where

S – the social insurance period of the person;

K – the person's insured income calculated by dividing the annual income of the insured person by the average annual wages of the country. There is a ceiling limit set for K that must not exceed 5.

 $\,$  D  $\,$  the average insured income calculated as the country's average of the earned income from which pension insurance contributions are collected. The total amount of wages is divided by the number of the insured. Thus, D included in the formula for calculating the additional pension part and recalculated every quarter ensures the indexation of pensions taking into consideration the change of the country's average wages.

The coefficient 0.005 means that 0.5% of the employee's monthly salary annually goes to the additional future pension component.

The base pension is indexed according to the price index. Thus, the pension formula is created so that the base pension would reflect the inflation and the additional pension part would reflect the growth of the average salary.

Pay-as-you-go pensions schemes in the Baltic Countries: formula of pension benefits and rules of indexation

| Country   | Formula   | Indexation  |
|-----------|---|---|
| Estonia   | <ul> <li>Basic amount</li> <li>Insurance period supplement<br/>(until 01 01 1999)</li> <li>Insurance contributions supplement<br/>(since 01 01 1999)</li> </ul> | Consumer price index & Revenue of Social Insurance Fund |
| Latvia    | Notional defined contributions scheme since 1996 $P = \frac{K}{G}$ $P - annual pension; K - accumulated capital$  | Consumer price index & contribution wage base           |
|           | G - life expectancy   |   |
| Lithuania | Since 1995:  • Basic amount  • Insurance period and insurance contributions related supplement (0.5 percent of wage for one year of insurance period)           | Consumer price index & Insured income (wage)            |

Starting in 1995 working pensioners in Lithuania were paid all the granted old-age pension if their wages were less than 1.5 minimum monthly salary (MMS). However, if the salary exceeds this limit and if the person is younger than 65 years, only the base pension part is paid. Seeking to reduce the expenditure of SSIF from 1 January 2001 the following procedure was effective for 6 months – working pensioners were paid the base pension part and if their income from which insurance contributions were calculated did not exceed 1.5 MMS, they were also paid a certain part of the additional pension. However, the rew procedure aroused great discontent of the public and thus from 1 July 2001 the procedure of paying pensions to working pensioners changed again. If the wages of the working pensioner do not exceed 1 MMS (430 Lt), they are paid the whole old-age pension. If the salary is bigger than 1 MMS but does not exceed 1.5 MMS (645 Lt), the whole base pension part (138 Lt) and a certain part of the additional pension are paid but the pension cannot exceed 218 Lt. If the income of the working pensioner exceeds 1.5 MMS, they are paid only the base pension part. In 2000 every sixth pensioner was working (15.6 percent).

<sup>&</sup>lt;sup>14</sup> Social report, 2001.

If the pensioner refuses their old-age pension for some time, in the future their pension is increased by 8 percent of the calculated pension amount for every year of postponement but not more than for 5 years.

The pension calculation formulas described above and the indexation procedure of pensions already paid will finally form the amount of pensions and the standard of pensioners' living only after the retirement age will be reached by the generation who just start their work career at the moment of these formulas taking effect. Until now, even though they are effective the amount of pensions has been determined by the Soviet salary structure and employment model as the work experience acquired during that period and amounts of the received salaries are accounted this or that way when calculating pensions.

The Baltic countries still preserving the universality of providing pensions for older people (due to the universal employment that existed before the transitional period) and the expenditure for financing pension systems being modest, the average amount of pensions is also modest. True, of these countries Latvia is outstanding in respect of pension financing resources. It has much bigger pensions than other neighbouring countries. The replacement rate (the proportion of the average pension and average net salary) in Latvia exceeds 50 percent, in Estonia and Lithuania it is only a little higher than 40 percent (Table 72).

| Replacement Rate for Public Old-age Pensions* |      |      |      |      |      |      |
|---|------|------|------|------|------|------|
| 1995  | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 |
|   |      |      |      |      |      |      |
| 35  | 41   | 40   | 39   | 45   | 41   |      |
|   |      |      |      |      |      |      |
| 45  |      | 48   |      | 57   | 55   |      |
| 48  |      | 52   |      | 53   | 51   | 50   |
|   |      |      |      |      |      |      |
| 41  | 40   | 42   | 42   | 43   | 42   | 42   |

<sup>\*</sup>net wages Casey B., 2002.

Estonia

Latvia Old New Lithuania

Small social insurance pensions distinguish the Baltic countries, especially Estonia and Lithuania, not only among the majority of the EU countries but also among candidate countries (cf. Table 73). On the other hand, Latvia having the smallest economic resources as compared with other Baltic countries (the smallest GDP for one resident) devotes the bigger part of resources to pensions and guarantees the biggest pensions in the countries compared. It proves the statement that the amount of pensions depends not only on the economic potential of the country but also on the country's prevailing values and political convictions.

Table 73 The Proportion of Average Old-Age Pension and Average Monthly Salary\* in 1997 in **Some EU -Candidate Countries (in percent)** 

| Country   | Proportion of the average | Proportion of the average |
|-----------|---------------------------|---------------------------|
|           | pension and gross average | pension and net average   |
|           | salary                    | salary                    |
| Estonia   | 32.5                      | 41.4                      |
| Latvia    | 38.7                      | 52.5                      |
| Lithuania | 31.3                      | 42.3                      |
| Bulgaria  | 55.0                      | 65.6                      |

V.Katkus, R.Lazutka. The Establishment of the Pension Funds System in the Baltic States.

|                |      | 1    |
|----------------|------|------|
| Czech Republic | 45.3 | 58.3 |
| Slovakia       | 44.7 | 60.8 |
| Slovenia       | 42.7 | 67.5 |
| Poland         | 69.6 | 70.3 |
| Romania        | 30.2 | 40.3 |

<sup>\*</sup> Czech Republic, Romania, Slovenia – the gross average salary of industrial workers Source: The experience of Central and Eastern Europe, 99, Vol. 1, p. 47

Table 74
The Proportion of the Average Old-Age Pension with the Average Disposed
Income for One Member of Household

|      | Estonia  |         | Latvia   |         | Lithuania |         |
|------|----------|---------|----------|---------|-----------|---------|
|      | Average  | Pension | Average  | Pension | Average   | Pension |
|      | monthly  | (%)     | monthly  | (%)     | monthly   | (%)     |
|      | disposed |         | disposed |         | disposed  |         |
|      | income   |         | income   |         | income    |         |
| 1996 | 1414.1   | 65.8    | •••      |         | 326.7     | 58.9    |
| 1998 | 1889.4   | 61.4    | 62.3     | 82.8    | 422.5     | 68.1    |
| 1999 | 1999.6   | 77.0    | 64.7     | 91.1    | 428.0     | 72.5    |
| 2000 | 2183.8   | 71.0    | 69.2     | 86.4    | 415.4     | 75.2    |

Table 75
The Proportion of the Average Old-Age Pension with GDP per capita

|      |            | 0_ 0_0_0 | 80 010 1180 1 |      | FF-        |      |
|------|------------|----------|---------------|------|------------|------|
|      | Estonia    |          | Latvia        |      | Lithuania  |      |
|      | GDP per    | %        | GDP per       | %    | GDP per    | %    |
|      | capita for |          | capita for    |      | capita for |      |
|      | one month  |          | one month     |      | one month  |      |
| 1997 | 3714.55    | 27.6     | 107.9         | 39.4 | 861.84     | 27.8 |
| 1999 | 4623.68    | 33.3     | 135.35        | 43.5 | 960.48     | 32.3 |
| 2001 | 5820.38    | 26.7     | 167.72        | 34.9 | 1146.3     | 27.7 |

Although pensions in the Baltic countries are quite modest, starting from the middle of the last decade the average pension amount is relatively increasing as compared with the average disposed household income (Table 74). On the other hand, it is not increasing and is even going down (especially in Latvia) as compared with GDP per capita (Table 75). It means that in these countries the lately growth of economy had insignificant influence on the growth of income of all the population (at least for those households that are included in the research) but the situation of pensioners has relatively improved as compared with other groups of residents gaining income not from social insurance pension schemes.

### 21. Pillar II: Compulsory Accumulative Insurance Pensions

Widely known proposals of the World Bank on the establishment of the compulsory accumulative pension schemes have had a strong impact on the reforming of the pension systems in the Baltic States. <sup>15</sup> Meanwhile, every state has chosen its own different way of establishing multi-pillar pension system.

In 2004 Estonia, Latvia and Lithuania will become members of the European Union. Thus, the Baltic states will have to comply with the Maastricht Agreement criteria: state budget

1

<sup>&</sup>lt;sup>15</sup> World Bank strategy on pension reforms was presented in Averting Old Age Crisis, 1994

deficit shall not exceed 3 per cent limit, and the ratio of public debt and GDP shall not be larger than 60 per cent. In addition, all the governments of the Baltic States provide for considerable cost of adjustment for the EU requirements. These factors have had considerable impact on the choice of pension system reform rate and scale.

**Latvia** was first among the Baltic States to begin establishing an additional compulsory participation pension scheme, i.e. the so-called Pillar II. The scheme was launched in July 2001. It is a state pension scheme, which is administered by the State Social Insurance Agency. A share from 20 per cent social insurance contribution rate for old-age pension into NDC scheme is invested into financial assets.

The pension accumulation is based on unitization principle, i.e. individual contributions are invested depending on the individually chosen portfolio and are marked in units. The units are used for computation aims taking into account the accumulated assets and terms of the contract. Depending on the success of the investment the unit value is computed as a ratio of assets value at the time of computation and number of units at the time of computation.

State Social Insurance Agency makes contracts with assets managers and insurance suppliers on behalf of the state. It is anticipated that by January 2003 the only assets administrator in the Pillar II will be the State Treasury, which is entitled to invest assets only into Latvian securities and time deposits in a bank. Later, participants of the Pillar II will be able to chose private assets managers with a broader range of investment instruments. A person may change the asset manager no more often than once a year. Private assets managers (investment companies, licensed for activities in the Latvian territory, shall possess a separate license for the Second Pension Pillar.

The Pillar II is implemented without an increase of overall pension contribution rate, but it will influence the computation of NDC payments, which will be smaller if compared to those which would have been in case of non-funding of the Pillar II. It is planned to gradually increase contributions to the Pillar II with the proportional reduction of the contributions in the Pillar I. At the beginning, only a 2 per cent contribution is paid to the Pillar II, however by 2010 the rate should have reached 10 per cent (then equal shares will be paid to both pillars). (2 per cent contribution rate is anticipated to be paid till 2006, and in 2007, the rate should reach 4 per cent, in 2008 – 8 per cent, in 2009 – nearly 9 per cent and in 2010 it will comprise the level of 10 per cent).

At the beginning, for a period of 1.5 year the state will cover the cost of running and administration of pension funds. Later on, a maximum threshold of 2.5 per cent is planned for administration fee, but no restrictions shall be applied for its administration.

Participation of persons, who are under 30 years old on July 30, 2001, in the Pillar II shall be binding. Persons, who at the moment of law enforcement were 50 and older, shall be prohibited from participating in funds saving. Persons aged 30-49 may join the accumulation pension scheme on voluntary basis any time. Gradually, the Pillar II will include all persons under state pension insurance (approximately in 2035).

Total number of Pillar II participants in the beginning of 2002 amounted to approximately 280 thousand (approximately 27 per cent of the overall population insured by state social insurance). A low share of legitimate participants in the Pillar II should be noted as only 6 per cent of them voluntarily have chosen the Pillar II. The introduction of private administration of assets and its promotion campaign are expected to increase the number of participants considerably.

Due to the conservative character of the proposed investment portfolio of the State Treasury, which currently provides 5-6 per cent of the nominal rate of return, the Pillar II scheme does not look attractive. The rate of return of NDC scheme is higher (in the period of 1999-2001 approximately 9 per cent with the inflation rate of 2.5 per cent) if compared with the Pillar II. No guarantees on rate of return of invested pension assets are provided in Latvia due to the applied strict investment rules and possibility to choose the state fund.

After retirement there are possible two alternatives and by the choice of the participant the accumulated capital in the Pillar II may be:

- added up to the Pillar I pension for the computation of the general old-age pension on the basis of the NDC scheme formula, provided that the capital shall be accumulated (in NDC reserve fund) with the NDC rate of return, or
- transferred to the life-insurance company, which will provide life annuity later.

In the course of refunding of savings in the Pillar I, the Pillar II contributes to the long-term prospects of the Pillar I budget. It is a typical characteristic of the Latvian system. It can improve the NDC scheme liquidity and provides for a more flexible use of the Pillar I reserve fund.

Any capital left after the participant's death shall be transferred to the state pension budget for the survivor's benefits (payments to children) according to the Law on the Pillar I. Spouses have no right of receiving survivor's payment in either Pillar I or Pillar II.

In contrast to the NDC scheme, the Pillar II provides for a wider choice after retirement. For example, life insurance provides for a possible joint-annuity, which in case of death of the insured persons, will be paid to the spouse; with the postponed payment of pension (up to 10 years) the size of the latter increases for a certain amount; it may be decided that in different chosen periods the different sizes of pensions would be paid, etc. In case of refunding to NDC scheme, the savings variant also has its advantage, as it guarantees a stable indexation of pension according to the increase of prices and salaries.

Pillar II pension taxation rules depend on the selected variant and shall be done according to either the Pillar I pension taxation rules or life-insurance valid regulations.

The main restrictions applied to the investment shall be as follows:

- The funds shall invest solely into securities issued by state, municipal or international financial institutions; debt securities of commercial entities; stocks and other capital securities of commercial entities; deposits of credit institutions; investment funds and derived agreements (only for currency hedging).
- Investment into real estate, loans and self-investment shall be prohibited.
- Investment is permitted in the Baltic states, EU, EFTA and OECD countries (with investment grade credit rating and with 70 per cent currency matching limit and 10 per cent limit for each non-matching currency).

In 2002, the Pillar II assets were mainly invested into Latvian state securities (89 per cent). The deposits in investment portfolio amounted only to 7 per cent, whereas 4 per cent stood for correspondent accounts.

Table 76

Activity indicators of the Pillar II in Latvia (2002, June)\*

Pillar II assets, EUR (thou) 9,515

| Per cent of GDP  | 0.1     |
|--|---------|
| Including, into  |         |
| State securities of Latvia, EUR (thou)                               | 8,442   |
| Time deposits in bank, EUR (thou)                                    | 679     |
| Correspondent account, EUR (thou)                                    | 394     |
| Average interest rate (per cent)                                     | 5.4     |
| Number of participants   | 280,000 |
| Share of total number of persons paying contributions to the general | 27      |
| social insurance   |         |

<sup>\*</sup>Vanovska, I. 2002.

Pillar I budget in Latvia currently shows deficit. The implementation of Pillar II has increased the debt. If the planned rise of contribution rate to 10 per cent will prove to be too expensive, the cumulative scheme may destabilize the state NDC pension scheme.<sup>16</sup>

**Estonia** began establishing compulsory additional pension scheme one year later than Latvia. The financial basis for this scheme was additional contributions, which are paid by the employed together with the share of the social insurance pension contribution. The employed persons shall transfer 2 per cent of their income to the selected insurance funds. In addition to this amount there are calculated 4 percentage points of the social tax. Tax Board transfers 16 per cent of social tax to the State Pension Insurance Fund, 13 per cent of social tax to the State Health Insurance Fund and 4 per cent of the social tax to the bank account of the registrar of the Estonian Central Register of Securities.

Compulsory participation in the Second Pension Pillar is foreseen for those persons who began working in 2001. All persons born after January 1, 1983 and beginning their work shall participate in the accumulative pension insurance.

The accumulative pension for older persons shall be of voluntary character (dates are set for persons born in certain years when they are supposed to present their applications for participation in the Second Pension Pillar: e.g. Born in 1942-1951 may submit their applications by June 1, 2002, born in 1982 – by November 1, 2024 etc.).

The insured may pay contributions only into one compulsory pension fund. Paying contributions to pension fund, a person receives a number of units issued by the pension management company, which corresponds to the amount of contribution paid.

Only those owners of units will receive the compulsory accumulative pension, who are of pension age, who are recipients of state pension stipulated by the State pension insurance or other laws of Estonia (if legally they are entitled to it) and provided they have paid contributions for no less than 5 years. The insurers shall apply the same mortality rate table both for males and females in the course of making the contract.

The units of compulsory pension fund may be replaced once per year on the first calendar day after January 1. The compulsory pension fund units may be replaced only with the units of another compulsory pension fund. Willing to change the compulsory pension units its owner shall have at least 500 units. All the compulsory pension fund units of one owner shall be replaced per one time.

<sup>&</sup>lt;sup>16</sup> Vanovska, I. 2002.

Observing the Law on Accumulative Pension the contributions for compulsory accumulative pension shall be deducted from the personal taxable income. However, the payments from compulsory pension fund to the inheritor of the units owner shall be taxed and the payment shall be done on the basis of the insurance contract.

According to the valid legislation a pension fund is an investment fund under contract, the main objective of which is to provide the fund's depositor (shareholder) with a possibility to receive additional income when he/she is 55 years or is incapable for work.

The pension fund may be administered only by the fund administrator, possessing a corresponding license for such kind of activities, or, following the provisions of the Law on Investment Funds, acting as a bank of accumulative pension fund. Operation license is granted for an unlimited period.

Separate operation licenses are issued for administration of voluntary and compulsory pension funds. Compulsory pension fund administration license grants the right for administration of any type of pension fund, management of other investment funds and provision of securities portfolio management services.

A compulsory pension fund shall not invest into shares more than 50 per cent of market value of the pension fund assets. The Investment Funds Act stipulates that the market value of securities defined therein shall not exceed 5 per cent of the market value of the pension fund assets. The pension fund assets may be invested into monetary market instruments and securities defined in the Investment Funds Act observing the pension fund regulations. In order to safeguard the interest rate of unit owners the Ministry of Finance may limit the investment into securities and monetary market instruments.

The value of issued securities, which belong to the same group of persons, shall not exceed 5 per cent of market value of compulsory pension fund assets. The value of securities, issued or guaranteed by the state, shall not exceed 35 per cent of pension fund assets market value. The assets of pension funds may be invested into units or shares of other investment funds only to extend provided on the pension funds regulations. The value of investment fund units and shares shall not exceed 5 per cent of market share of the pension fund assets. In the share of assets of the compulsory pension fund, the value of shares or units of administered investment means of the administration companies, which belong to the same group as the pension fund administrating company, shall not exceed 30 per cent of market value of pension fund assets.

According to the Estonian legislation, each management company shall establish at least one pension fund, the assets of which is invested into securities exclusively (bonds, commercial papers, etc) and bank deposits. Such a fund shall be prohibited from investing into shares.

On 31 October, 2002 in Estonia there were 6 fund management companies (Eesti Ühispank Asset Management, ERGO-Trigon Fund Management, Hansa Fund Management, LHV - Lõhmus, Haavel & Viisemann, Sampo Asset Management and

Seesam), which are running a total of 15 different funded pension funds:

Eesti Ühispanga pensionifond Konservatiivne (100% interest fund)

```
Eesti Ühispanga pensionifond Progressiivne (up to 50%
invested in shares)
ERGO Rahulik Pensionifond (100% interest fund)
ERGO Tuleviku Pensionifond (up to 50% invested in
shares)
Hansa Pensionifond K1 (100% interest fund)
Hansa Pensionifond K2 (up to 25% invested in shares)
Hansa Pensionifond K3 (up to 50% invested in shares)
LHV Intressipensionifond (100% interest fund)
LHV Aktsiapensionifond (up to 50% invested in shares)
Kohustuslik Pensionifond Sampo Pension Intress (100%
interest fund)
Kohustuslik Pensionifond Sampo Pension 25 (up to 25%
invested in shares)
Kohustuslik Pensionifond Sampo Pension 50 (up to 50%
invested in shares)
Seesami Võlakirjade Pensionifond (100% interest fund)
Seesami Optimaalne Pensionifond (up to 25% invested
in shares)
Seesami Kasvu Pensionifond (up to 50% invested in
shares)
```

By October 31, 2002, as many as 207,200 thousand persons have invested their means into pension funds, 170,145 of them will start making contributions to funded pension as of January 1, 2003. The remaining 37,055 joined the funded pension before June 1 and started making contributions already on July 1.

On 31 October 2002, the market share by fund managers was as follows: Hansa Investeerimisfondid 50.5%, Ühispanga Varahaldus 28.3%, Sampo Varahaldus 14.5%, Ergo Varahaldus 3.3%, Seesam Varahaldus 1.9% and LHV Varahaldus 1.5%. It may be noted that to pension fund managers have collected nearly 80 per cent of all contributions to the pension funds. Two shareholders - Hansabank and Uhisbank - dominate in this, likewise in insurance and bank markets.

```
On 31 October 2002, the market share by funds was as follows:

Eesti Ühispanga Pensionifond Konservatiivne - 6.5%,
Eesti Ühispanga Pensionifond Progressiivne - 21.8%
Ergo Rahulik Pensionifond - 1.1%
Ergo Tuleviku Pensionifond - 2.3%
Hansa Pensionifond K1 (konservatiivne strateegia) - 6.2%
Hansa Pensionifond K2 (tasakaalustatud strateegia) - 18.7%
Hansa Pensionifond K3 (kasvustrateegia) - 25.6%
Kohustusliku Pensionifondi Sampo Pension 25 - 0.4%
Kohustusliku Pensionifondi Sampo Pension 50 - 2.8%
Kohustusliku Pensionifondi Sampo Pension Intress - 11.2%
LHV Aktsiapensionifond - 1.2%
LHV Intressipensionifond - 0.3%
Seesami Kasvu Pensionifond - 0.8%
```

Seesami Optimaalne Pensionifond - 0.7% Seesami Võlakirjade Pensionifond - 0.4%

The conservative pension funds invest 100 per cent of their assets into bonds. 19.5 per cent of Estonian pension contribution payers have chosen that particular strategy.

Meanwhile, funds with a balanced strategy of investing 75 per cent into bonds, and 25 per cent - into shares were chosen by 19.8 per cent of pension contribution payers.

Pension funds with aggressive strategy of investing 50 per cent of assets into bonds and the remaining 50 per cent into shares were chosen by almost 60 per cent of all the payers of pension contributions.

At the end of May 2002, 66% of persons who had joined the funded pension system have chosen equity funds, 19% balanced funds, and 15% fixed income funds. One can claim that the number of persons who go for an aggressive investment strategy is declining; however, approximately 60 per cent of the contribution payers chose the investment into shares. On 31 October 2002, total pension funds investments portfolio reached about EUR 10 millions.

**Lithuania** saw a Pension system reform concept on April 26, 2000, which provides for the introduction of compulsory accumulation in private pension funds, and on October 25 of the same year the White Book on pension system reform was published analyzing the needs, possibilities, modes and possible consequences of the pension reform implementation. On the basis of these documents in 2001 a draft Law on Pension System Reform was prepared, which was amended and improved later on.

On February 6, 2001, Pension Reform Implementation Measures Plan for 2002-2002 was approved. It is anticipated that after adoption of this law other laws related to pension system will be amended and a pension fund supervision system will be established, the new pension system administration procedures will be prepared as well as public information campaign will be prepared and launched. <sup>17</sup>

The Pension reform concept (January 14, 2000) maintains that the main objective of the new pension reform is to "change the pension system in such a way, that persons of pension age could get higher income than until now, meanwhile to ensure that the reallocation would not be increased, but reduced and to ensure the long-term sustainability of the system, which will include all the inhabitants". In view of achieving this objective there is a necessity to change the pension system financing mode and reorganize the state social insurance pensions. The reform shall ensure that social insurance pension system could avoid financial deficit, which occurred during the recent period. It is viewed that the new pension system should have a long-term impact on the national economy: promote saving in the country, curb down the tax avoidance, strengthen capital markets and financial infrastructure growth.

The concept provides for establishment of a three-pillar pension system. The aim of Pillar I is to ensure for each citizen a minimum protection against poverty and compensate a share of lost income due to old-age or incapacity for work. Pillar II should guarantee old-age pensions, the size of which would more exactly correspond to the lost income. Pillar III provides conditions for insurance for those who would like to receive better protection in old age than they could receive from Pillar I and Pillar II. This insurance could be executed in pension

<sup>&</sup>lt;sup>17</sup> Social report, 2001

funds and/or insurance companies. Besides, the concept stresses the weakening of the compensation function of Pillar I in the course of time, with its gradual transfer to Pillar II.

On the basis of the draft Pension System Reform Law (2001), one may indicate the main aspects of the planned pension reform. It was anticipated that only persons younger than 40 years old would participate in the pension reform, whereas persons under 50 would chose either to pay contributions to the private funds or only stay in the social insurance system. In the course of improving the draft law it was decided that participation of persons less than 30 years in the accumulation funds would be compulsory.

At the time being, employees and employers pay contributions of 25 per cent of the salary to the pension insurance. With the introduction of pension reform 5 percentage points of this contribution (i.e. 5 per cent of the salary) should be transferred to the private pension funds. Thus, the insured would receive an old- age pension by 20 per cent less from the social insurance, and the above-mentioned 5 per cent of salary would be used as savings from a private fund. Explanatory note to the draft pension system reform law (2001) states that further increase of the size of the contribution is anticipated in the future. It is not planed to increase the general contribution rate. The draft pension system reform law provided that the contributions to the accumulative pension funds should be paid since January 1, 2003. The improved draft law extended this term till 2004.

The pension reform White book states that due to transfer of the share of the social pension insurance contribution to the accumulative funds, there will be a budget deficit in the State Social Insurance Fund, which in approximately 15 years will amount to LTL 500 – 700 million per year or 1.5 per cent of GDP, and later it will decrease and will remain as long as the generation that had not participated in the private pension scheme is alive. The explanatory note to the improved draft law forecasts that budget deficit may reach approximately 0.7 per cent of GDP per year. The deficit will be met from privatization fund, loans and state budget appropriations. Thus, the Government of Lithuania is seeking to reduce the pension reform impact on the budget deficit.

New documents on the pension reform show the changes in the objectives of the Pension Reform Concept, which have been narrowed to the aspiration to ensure higher income than now for the old-age persons in order to guarantee the living standards corresponding to the standards in the working period.

In November 2001, the Government of the Republic of Lithuania approved the draft Pension System Reform Law. Parliamentary readings of the draft law have continued for half a year and the draft law was returned to the Government. The Government was proposed to abandon the principle of compulsory participation in private pension funds, but to provide possibilities for motivating population for further voluntary accumulation of their additional pension. Besides, the new pension reform draft law requires the Government to provide pension schemes sponsored by employers.

The Lithuanian parliament on 3 December 2002 adopted the law on pension reform, which is to become effective from 1 January 2003.

The new law entitles the Lithuanian population holding compulsory state social insurance to join pension accumulation and receive additional income after retirement.

The law stipulates that persons insured for a full state social insurance pension will be free, according to their

choice, to accumulate pension contributions in pension accumulation funds (companies). Those who decide on joining such a scheme will not be able to withdraw from it, except for the cases of full disability.

Under the law, the persons will be able to conclude a pension accumulation contract with a pension fund until 1 September 2003, and in every calendar year - from January 1 till July 1. These rules shall not apply to the newcomers of the labour market who receive a social insurance certificate for the first time.

The insured will be free to choose among pension saving funds or switch to other fund, with exception of the first three year after concluding a pension saving contract. A contribution of each participant will make up 2.5 percent of his or her income on basis of which contributions are calculated in 2004, 3.5 percent - in 2005, 4.5 percent - in 2006, and 5.5 percent - from year 2007.

The pension contributions will be calculated and transferred to the opted pension funds from 1 January 2004.

Unlike other pension system reform variants, the latter suggests that implementation of the accumulation function should include not only pension funds, but life-insurance companies, which have a necessary infrastructure and operational experience in the field.

The main shortcoming of the model is its uncertainty as it is not clear how many persons (like in Estonia) would participate in the accumulation. Besides, the relatively small scale may cause delay in the establishment of pension funds. At the same time the latter characteristic may be recognized as an advantage as the lack of funds which would be withdrawn from the Social Insurance Fund, would not be considerable and it could be easily met from the state budget. However, it is unclear how much budget money will be needed to cover losses in the Social Insurance Fund.

Basically, a two-pillar pension system is planned in Lithuania comprising of the First and Third Pillars. Pillar II establishing compulsory accumulative insurance pensions is anticipated in distant future.

Thus, three Baltic States are looking for their own ways of creating additional pension schemes. Estonia's choice is characterized by the fact that they do not restrict themselves only to the privatization of a part of social insurance pensions, but provide for additional participants' contributions to the created compulsory participation accumulation scheme. The peculiar feature of the Latvian system is the refusal to establish private pension funds at the initial stage of compulsory accumulative pension scheme creation, and the accumulation begins in the very social insurance system. For the meantime Lithuania has suspended the compulsory participation in private accumulative pension schemes and postponed the decision for indefinite period.

## Privatisation of Pay-as-you-go Pensions Schemes in the Baltic Countries

| Country           | Transfers        | Rules of      |
|-------------------|------------------|---------------|
| and first year of | of contributions | participation |

| assets accumulation |                      |                             |
|---------------------|----------------------|-----------------------------|
| assets accumulation | 120/ 1 1/1           |                             |
|                     | 13% health care +    |                             |
| Estonia             | 20% pensions         | Compulsory for new          |
|                     |                      | employees in 2001 and born  |
| 01 01 2003          | 4 % social insurance | after 1983                  |
|                     | +                    | &                           |
|                     | 2 % participant      | Voluntary for older         |
|                     | 30.86 % pensions     | Compulsory for young        |
| Latvia              |                      | employees under 30          |
| 01 07 2001          | 2% — 10% (in 2010)   | &                           |
|                     | social insurance     | Voluntary for 30-49         |
|                     | 22.5%+2.5% pensions  |                             |
| Lithuania           |                      | Voluntary for all employees |
|                     | 2.5% — 5.5% (in      | without age constrains      |
| 01 01 2004          | 2007)                |                             |
|                     | social insurance     |                             |
|                     | (employees)          |                             |
|                     | (cilipio y ces)      |                             |

The diversion of a part of social insurance pension contributions for the private pensions accumulation requires large expense in the transition period at the time when financing of the present retired persons should be continued and accumulation of the capital for the future pensioners should be in place. Baltic countries have had difficulties for the last five years with drawing balance in the social insurance fund budgets, in some years their deficit amounted to 1-1.5 per cent of GDP (see Table 77).<sup>18</sup>

Table 77
Annual Balance of the State Social Insurance budget
(surplus/deficit (-); per cent GDP)

|      | ` 1      |          | ,            |
|------|----------|----------|--------------|
|      | Estonia* | Latvia** | Lithuania*** |
| 1995 | 0.5      |          | 0.0          |
| 1996 | -0.3     | -0.3     | -0.1         |
| 1997 | 0.0      | 0.6      | -0.1         |
| 1998 | 0.3      | -0.2     | -0.3         |
| 1999 | -1.0     | -1.5     | -1.3         |
| 2000 |          | -0.7     | -0.8         |
| 2001 | •••      |          | 0.0          |

<sup>\*</sup> Schiff, J. (2000). P. 7.

 $**2000\ Social\ Report.\ Ministry\ of\ Welfate\ of\ Republic\ of\ Latvia.$ 

p. 26.

Latvia will have to face special difficulties with the cost during the transition period, as it planned a more speedy transition to the accumulative pension system, and the contribution rate as it has been mentioned previously, is expected to be increased even up to 10 per cent. In Estonia, this transition is more lengthy, as joining the accumulative system is compulsory only for the person newly emerged to the

<sup>\*\*\*</sup>State Social Insurance 2000: statistic data. Economic and Social Trends of the State Social Insurance in Lithuania 3/2000, p. 18.

<sup>&</sup>lt;sup>18</sup> Lithuania managed to balance the social insurance budget in 2001 by making a radical cut of pension payment to the working pensioners.

labor market, whereas those, who may chose the system on voluntary basis, should pay additional contributions.

However, as it is seen from the Estonian experience, in 2003 the state budget deficit may additionally increase by EEK 300 million. The Government was planning to allocate EEK 384 million next year for that purpose, however it is clear already now, that no less than EEK 700 million would be needed. November 1, 2002 was the deadline for volunteers to join the pension accumulation program from January 1 2003, in order to allow them to receive payments of the pension funds. This date was the last one for persons born in 1942-1956. 45 per cent of persons, whom the accumulation pension funds program was designed for, have joined it.

Table 78

Total State Debt (% of GDP, at the end of period)

|      | Estonia | Latvia | Lithuania |
|------|---------|--------|-----------|
| 2000 | 3.2     | 13.1   | 28.2      |
| 2001 | 2.7     | 14.9   | 26.9      |

Economic and Social Development in Lithuania January –May, 2002. P. 120.

Meanwhile, Estonia has a more considerable advantage, i.e. it has no public debt (only approximately three per cent of GDP) (Table 78). Latvia has an average size debt, and Lithuania's debt comprises approximately 27 per cent of GDP. Transition period costs became the main issue during the discussion of compulsory participation in accumulative pension scheme, which would be funded by a share from social insurance contribution. A considerable public debt and other commitments (compensation to the clients of bankrupt banks, owners of the property nationalized in the Soviet period) were the major argument for some policy-makers when taking decision on pension reform.

## 22. Pension Pillar III

Private pension funds (PPF) schemes were obviously impossible prior to the restoration of independence in the Baltic countries. In the first years of independence the main attention was paid to the privatization of industry, and in the field of pensions the key point was the social insurance reform. Thus, only in 1995-97 the first draft laws on regulating additional voluntary pension accumulation were designed.

In **Estonia** the Third Pension Pillar has been regulated by the Pension Funds Act since August 1, 1998 till October 1, 2001. The same Act is applicable to the First and Second Pillars.

Population may participate in Pillar III in two following ways:

- by implementing pension insurance policy of the licensed private insurance companies;
- in pension funds units, which are managed by the private funds administrators.

Pension funds units may be purchased only by natural persons, pension managing companies or persons acting as a pension managing company. The unit is not dividable and shall not belong to several persons. However, pension fund units may be of joint ownership of spouses. The units purchased in voluntary pension fund may be changed, however only into the units of another voluntary pension fund.

In order to change a pension fund, the owner of units is supposed to have at least 1,000 pension fund units. However, pension fund regulations may provide for certain restrictions on

the number of units changed per one time; minimum period for changing units and a period after which a person is allowed to change his/her units again. This period may not be longer than 2 years. In the course of changing the pension fund for a pension management company a person shall pay a defined redemption and issue fees.

The accumulated capital of units owner shall be inherited. If policy owner dies, the payment to his appointed successor shall be done in accordance with the terms of the insurance contract.

Voluntary supply of accumulated pensions is provided by the voluntary pension funds, possessing operational licenses for the voluntary pension fund management. The stock capital of a pension management company administrating the activities of voluntary pension fund shall be no less than EEK 12 million. The net assets of the company shall be at least of the same size. According to the Pension Funds Act of Estonia, during the first year the fund may invest up to 30 per cent of its capital into companies shares, and next year it may increase its investment up to 40 per cent.

During the first nine months of 2002, 7,635 new voluntary pension insurance or Pillar III pension insurance contracts were concluded in Estonia.

By the end of September 2002, a total of 41,111 supplementary or voluntary pension insurance contracts had been concluded (Estonian Insurance Companies' Association data). Based on the Statistical Office labor market data, the amount of people who have concluded a Pillar III pension insurance contract makes 7% of the employed workforce.

In the first nine months of 2002, a total of EEK 140.52 million of insurance payments were made based on the voluntary savings pension contracts.

Financial inspection data indicates that the most popular among Pillar III pension insurance contracts was capital savings insurance, for which people paid EEK 77.3 million in nine months. It was followed by pension insurance with EEK 53.6 million and investment risk life insurance with EEK 9.6 million.

**Latvia** in 1997 designed laws and supervision infrastructure necessary for the implementation of private voluntary pension insurance (Pillar III), which came into force since July 1998. <sup>19</sup> There are two private pension funds (PPF) types—open funds, which may offer services to all the population, and closed funds, the members of which can be only workers of pension fund establishing body. No restrictions applied to the closed PPF establishing bodies, whereas the establishing bodies of the open—PPF may be only commercial banks and life insurance companies registered in Latvia. Only commercial banks, life insurance companies, brokers companies or investment companies, possessing the licenses of the Finance and Capital Market Commission may manage PPF assets.

PPF are described as financial and "credit stock" non-profit companies. All of them operate on the principle of defined contributions and do not provide any guarantee as to the size of the contributions. Certain investment restrictions and special financial requirements (required size of capital of establishing body) should be met by the assets managers. The Financial and capital market commission performs the function of strict supervision.

Following restrictions are applied to the investment of the pension plans:

- investment into one issue securities shall not exceed 10 per cent of the overall value of pension fund assets and 25 per cent of the overall value of such securities

<sup>&</sup>lt;sup>19</sup> Kirsons, I. 2002.4.

- issue (except for government or municipality securities, the investment into which is not limited);
- investment into real estate unit shall not exceed 15 per cent of pension fund assets value and the overall share of investments into real estate shall not exceed 25 per cent of the overall value of pension fund assets;
- investment in foreign countries shall not exceed 15 per cent of the overall pension fund assets value.

Pension payments from PPF may be done for persons who are 55 years old. However, possibilities are provided for paying the payments prior to the indicated age: 1. A person is recognized I class disabled for the lifetime; 2. Bankruptcy of the employer, who has been paying contributions for the behoove of a pension plan member; 3. Member of the pension plan dies prior to the age defined in the pension plan; 4. A person has entered into an agreement on term-membership in a pension plan in order to transfer its capital into another plan or fund.

There are three possibilities of receiving pension payments from PPF. The accumulated pension capital may be:

- paid in a lump sum;
- transferred into a life-insurance company, which will provide the lifetime annuity;
- transferred into the state pension budget (i.e. added up to the Pillar I capital), in which case the aggregate pension shall be computed by applying NDC scheme formula the same way as in the case of the Pillar II refunding variant.

In **Lithuania** the legal PPF regulation began only in the beginning of 2000 after the enforcement of the Pension Funds Law. The objective of passing this law was to prepare the legal and institutional background for the establishment of private pension funds, in which population could voluntarily accumulate additional pensions.

The Law provided for the establishment of open pension funds, the establishing parties of which should comply with the authorized capital and managers' qualification requirements, namely:

## Bank deposit:

- Investments in Certificates of Deposit (CDs) are limited to 10 percent of the fund's assets.
- Investments in non-negotiable deposits are limited to 25 percent of the fund's assets.

### Interest-bearing securities:

- Central governments interest-bearing security investments are limited to 30 percent of the fund's assets.
- Local governments interest-bearing security investments are limited to 30 percent of the fund's assets.
- Companies interest-bearing security investments are limited to 15 percent of the fund's assets.

### Quantitative limitations on investments by asset class:

- Equities. Equity investments are limited to 40 percent of the fund's assets.
- Real Estate investments are restricted.
- Precious metals investments are restricted.
- Financial derivatives are limited to 10 percent of the fund's assets. According to regulations, financial derivatives can be used for hedging only and must be included in the pension program profile.

All the Baltic countries provide for tax allowances for the private voluntary pension schemes of the so-called Pillar III. The largest personal income tax incentives are granted in Estonia, where neither contributions nor payments are taxed, provided they are paid in the form of defined payments as non-decreasing lifetime annuity. If they are paid in other ways, they are taxable by a reduced 10 per cent rate, whereas an ordinary income tax rate comprises 26 per cent.

According to the Estonian Income Tax Act the contributions for the voluntary pensions shall be deducted from the taxable income, provided these contributions amount to 15 per cent of the personal annual income. The minimum contract age, for which the tax privileges are granted, is 55, but not earlier than 5 years since the beginning of the contract. Tax privileges for pension fund payments shall be applied if a person was recognized as permanently incapable for work.

In Latvia, private pensions fund payments are taxed according to the general procedure by applying the valid tax rates. However, several privileges are applied for contributions. First, employer's contribution for the behoove of the employee shall be deducted from the taxed profit. Second, 10 per cent of annual taxed personal income which do not exceed the contribution, shall be deducted from personal taxable income. Third, Latvia is the only country out of her Baltic neighbors grant privileges for the contributions into the private pension schemes, and at the expense of the social insurance contributions, i.e. if the aggregate amount of employer's contributions into private pensions scheme, as well as insurance premium payments for the life, health and accident at work insurance does not exceed 10 per cent of the insured personal gross salary, then these expenses shall not be taxed by the compulsory private social insurance contributions.

Table 79
Natural Person's Income Tax Privileges for the Private Voluntary Schemes in the Baltic States

|            | Estonia               | Latvia                | Lithuania             |
|------------|-----------------------|-----------------------|-----------------------|
| Contributi | Up to 15 per cent of  | Up to 10 per cent of  | Up to 25 per cent of  |
| ons        | personal income is    | personal taxable      | personal income       |
|            | not taxed             | income is not taxed   | from salary is not    |
|            |                       |                       | taxed                 |
| Capital    | Tax-exempt            | Tax-exempt            | Tax-exempt            |
| increase   |                       |                       |                       |
| Payments   | From 0 to 10 per cent | Taxed according to    | Taxed according to    |
|            | depending on the      | the general procedure | the general procedure |
|            | form payment          |                       | – 15 per cent.        |

It is anticipated that in Lithuania employer's premiums paid to the pension funds for their employees shall be included into company's expenditure. Besides, personal contributions to the pension funds shall be deducted from the taxable income. Employers and person's contributions, which are granted the above-mentioned privileges, shall not exceed 25 per cent of the personal salary. Capital increase in the funds shall not be taxed, however, private pension payments are liable to taxation according to the general procedures.

In Latvia, there operate one closed pension fund "Pirmais slegtais pensiju fonds", serving the employees of two largest Latvian enterprises ("Lattelecom" and State Electric Power

Enterprise "Latvenergo") and three open funds ("Balticums", "Parex" and "Unipensija") offering 8 pension plans for the population. <sup>20</sup>

Number of Persons Participating in Private Pension Funds (thousand)

| 1999 12 31 | 5.7  |
|------------|------|
| 2000 12 31 | 7.0  |
| 2001 12 31 | 17.4 |

Number of persons in private pension funds is also not considerable, although it is constantly increasing. At the end of February 2002, the number of PPF participant amounted to approximately 18 thousand persons or 2 per cent of the total number of persons participating in the state social insurance.

Table 81 Composition of the Pillar III Overall Assets, December 31, 2001

| Investment                | Per cent | mln. EUR |
|---------------------------|----------|----------|
| Fixed interest securities | 61       | 10.3     |
| Term deposits             | 31       | 5.3      |
| Shares                    | 4        | 0.7      |
| Other                     | 4        | 0.7      |

A considerable share of the accrued capital is taken by 41-55 aged persons. The average monthly amount of contributions of the pension plans participants and employers, if compared with the average country's gross salary (EUR 284), is considerably low (EUR 22). The average accrued pension capital per participant amounts only to EUR 973.

At the end of 2001, the overall accrued capital of all pension funds was EUR 17 million (approximately 0.2 per cent of GDP). PPF investment portfolio is very conservative, as 92 per cent of the assets was invested into government securities and bank deposits.

In spring 1999, the Finance Minister of Estonia granted an operation license for the first pension fund in Estonia, which belonged to the investment fund "Hansa Asset Management". The main company of the first pension fund is the largest Estonian bank "Hansapank".

During three years of Pension Funds Law enforcement there was no pension funds established in Lithuania. Among the reasons one may mention the fact that for several years there have been discussions concerning compulsory participation in private pension scheme. The Government designs legal acts on the basis of which the partial privatization of the social insurance pensions is planned. Maybe potential pension funds establishing bodies are expecting a pension reform to begin shortly, which would require quite another strategy than voluntary participation scheme.

Another possible reason of non-existence of private pension funds in Lithuania is a more favorable treatment of life insurance in the tax legislation. In case of life insurance for a longer period than 10 years, neither premiums, nor payments are taxed.

Following the data of the State Insurance Supervision Authority, at the beginning of 2002 there were approximately 200 thousand valid life-insurance contracts in Lithuania. More than

<sup>&</sup>lt;sup>20</sup> Vanovska, I. 2002. P. 18

half of them was made for the wedding insurance for the fund saving for children. The remaining half could be an instrument for the accumulation of the future pension.

According to the data of the "VB Gyvybes draudimas" life insurance company, the portrait of an owner of the investment life insurance policy shows, that more than half (55 per cent) of the insured females have entered into contracts till the possible day of beginning of pension payment, if they are at least 55 years old at the end of the insured period). A similar share of males among the insured persons was smaller and comprised 27 per cent (the age of the insured person at the end of the insured period should be at least 60 years old).

Thus, until autumn 2002, Pillar III private voluntary pension schemes have just been at the stage of formation. Several pension funds began their operation in Estonia and Latvia, whereas in Lithuania additional security is ensured through life-insurance products.

#### 23. National Regulations on Pension Funds Portfolios

In Estonia and Latvia the second pension pillar will be based exceptionally on the mandatory defined contribution pension program. Every pension program participant will have only one account with the pension fund. According to the reformed pension systems in Estonia and Latvia, government institutions will directly manage the first pillar contributions, whereas the management of contributions to the second pillar was delegated to the private pension funds. As mentioned early, there is no second pillar in Lithuania.

In Latvia, for initial 1.5 years the sole manager of the pension funds has been the State Treasury and investment was restricted to only government securities and bank deposits. Since January 1, 2003, the funds of the scheme shall be managed also by private fund managers. Participants of the pension funds system have free choice of the manager and switches limited to once per year.

In Estonia from the early beginning the funds of the second pillar scheme shall be managed by private fund managers.

## 23.1. Requirements for Pension Fund Managers

In all Baltic countries special licenses are required for the pension funds management and separate license for the second pillar.

Only person holding a valid certificate for the correspondent qualifications may operate as a fund manager. The issue and revocation of the certificates are decided by the different local authorities in each Baltic country, for example, in Estonia such an authority is the Minister of Finance and in Lithuania - Securities Commission.

Skuciate, A. 2002

Common requirements for fund managers in the Baltic countries are as follows:

- Higher education;
- Adequate professional experience a fund manager must have, within the last 3-5 years, operated as fund manager for at least one year or has been involved in the provision of securities portfolio management services or experience in a financial institution of financial supervisory agency for at least three years. The requirements for professional experience in each country depend from financial institution structure, for example, in Estonia underline experience in securities portfolio management and in Lithuania on general experience in financial institutions, because of lack investment funds;
- Impeccable business and professional reputation;
- Fund managers may be employed by one management company.
   The same person may be the fund manager of several funds managed by one management company.

A fund manager may not be a member of the the

- Supervisory board or
- Management board or
- Employer of another management company.

The requirements for pension funds managers are very similar in all Baltic countries and small differences of the requirements reflect different experience of the national's financial institutions structure.

## 23.2. What Role do Assets Structures Play?

With mandatory schemes, governments have an obligation to ensure that pension plans are safe and ready to protect pension program participants from the bankruptcy of any pension fund. The arguments justify the portfolio regulations, which avoid a lack of diversification and ensure liquidity of the underlying assets. From another point of view, the most basic aim of investment is to achieve an optimal trade-off of the risk and returns by allocation of the portfolio to appropriately combinations of assets.

Blake, Lehmann and Timmermann (1999) found that during the 1980s and 1990s the most important task for pension fund managers was to establish and maintain the strategic asset allocation and the median total return earned by the UK pension fund over the sample period of 99.47 per cent of the total was due to this essentially asset structure. It indicates to regulatory authorities how sensitive the quantitative regulation of pension fund portfolio structure is. When regulatory authorities establish a quantitative structure between shares and bonds, they take responsibilities for the mean of the rate of return of pension funds industry.

### 23.3. Quantitative Investments Regulations

In Baltic countries pension funds investments regulations are based on quantitative restrictions. As a rule the regulation of mandatory pension funds and voluntary pension funds is different - the most stringent regulation is applied to mandatory funds because of the important role they play in each country.

Main objective of investment regulation in Baltic's:

- Informational asymmetry. A mandatory DC system creates a retail market with a large informational asymmetry between pension fund operators and pension program participants. As far as the information asymmetry is concerned, if a purchaser of a financial service finds it difficult or expensive to obtain sufficient information on the quality of the service in question, he may become exposed to exploitation. This may entail fraudulent, negligent, incompetent or unfair treatment as well as failure of the relevant institution per se.
- Sizeable proportion of personal wealth and long-term investment horizon. These phenomena are of particular importance for such retail users of financial services as personal pensions, because clients are seeking investment of a sizeable proportion of their wealth, contracts are one-off and involve a commitment over as much as 40 years. Such consumers are unlikely to find it feasible to make a full assessment of the risks to which pension plans are exposed including the solvency of the pension funds.
- Inexperience. Market participants and supervisors are inexperienced with the long term investments in the foreign securities markets.
- Markets limitation. The local Baltic's markets are thin and volatile. The pension funds investments will have impact on local market development and capital outflow through pension funds investment in foreign markets on macroeconomic situation.

First of all, pension fund investment strategies must be developed and implemented. A primary decision is to choose the asset categories to be included in the portfolio - usually money market instruments, equities, bonds, real estate and foreign assets. The Baltic's pension funds investment strategies are constrained by quantitative governments' regulations.

Estonia have most liberal approach to pension funds portfolio regulations and Lithuania most conservative if we take as a measure the share of equity and investments funds units in the total portfolio (Table 82). Latvia and Lithuania opposite to Estonia have no restrictions on the investments

into government's securities. This Estonian attitude reflects general approach to government budget deficit.

Limits on pension fund investment in selected domestic asset categories, (per cent)

| Country<br>Investme                | nts funds | Equi | ty<br>Loans | Real Es<br>Bank deposit |    | Bonds                |
|------------------------------------|-----------|------|-------------|-------------------------|----|----------------------|
| Estonia<br>30                      |           | 50   |             | 20                      | 35 | 35                   |
| Latvia<br>50                       | if        | 50   | 0           | 0                       | 50 | 50 (corporate)<br>No |
| governme:                          | nt or     |      |             |                         |    |                      |
| <b>Lithuani</b><br>20<br>(municipa |           | 40   | 0           | 0                       | 25 | 15 (corporate) 30    |
| 10 (CDs)                           | if        |      |             |                         |    | bonds)<br>No         |
| governme                           | nt        |      |             |                         |    | bonds)               |

Source: Estonian Financial Securities Authority; The Financial and Capital Market Commission (Latvia); Lithuanian Securities Commission.

In Baltic's as a general rule investments should be effected through organized exchanges and by listed, highly rated, and actively traded securities. They pension funds are mainly allowed to invest in OECD markets (Table 83). This limit allows avoiding the excessive concentration of risks in overseas emerging markets.

Lithuania and Latvia are countries' in Baltic's which put direct limits on foreign investments. Because as higher ratings of many OECD countries and as the Lithuanian national currency Litas was pegged to the Euro on February1, 2002, in principle, there will be no exchange risk on Euro investments, such a regulation haven't enough economic background. Estonia has different approach to this issue: they regulate foreign currency exposure by establishing currency matching limits.

Table 82

This attitude is closer to EU proposal on pension funds regulations.

Approach to minimum diversification requirements is the same in all Baltic countries.

Table 83
Other regulation of pension fund assets in Baltic States, per cent

| Country Direct limits on foreign investments | Minimum Allowed diversification investments requirements countries                                     | Currency<br>matching<br>limits |
|--|--|--------------------------------|
| Estonia<br>No limits<br>EEA<br>Estonia       | <pre>5 (bank    OECD    deposits)  5 (shares)  5 (investment    fund)    5 (bonds)</pre>               | 30 No limits for euro          |
| Latvia<br>15<br>EU                           | 2 (real estate)  5 (shares) OECD 5 investment  | 70<br>(open-end                |
| EFTA<br>Baltic                               | fund  10 (corporate debt securities) 15 (bank deposits) 25 (mortgage bonds) 35 (government securities) | units                          |
| <b>Lithuania</b><br>30                       | 5 (shares) OECD 5 (bonds) 5 (bank deposits)  | No limits                      |

Source: Estonian Financial Securities Authority; The Financial and Capital Market Commission (Latvia); Lithuanian Securities Commission.

Self-investment restriction is appropriate to prevent concentration of risk; especially in Baltic countries the concentration of the financial sector is very high. For example, in Estonia for mandatory pension's funds, the value of securities issued by a person belonging to the same group may not total more than 5 per cent of the market value of the assets of the pension fund (for voluntary pension funds - 10 per cent). In Lithuania, self-investment is limited to 25 per cent of the fund's assets. In Latvia self-investments is not allowed at all.

The regulation of pension funds investments in IPO's is crucial, because of small number of traded securities on the Baltic securities exchanges. Latvia allowed 20 per cent investments in IPO's and Lithuania making amendments to regulations on the investments into IPO's.

In principal, portfolio regulations in each Baltic country reflect a number of basic factors. Estonia and Latvia recognize the small number of investments products in "home" markets allowing more investments in foreign markets, but Lithuania puts stricter rules on foreign investments. Because of bigger government securities markets in Latvia and Lithuania, they provided for pension funds more investment freedom in these markets as opposite to Estonia. The approach to minimum diversification requirements is the same in all Baltic countries, but self-investments regulations follow different pattern in each country.

# 24. EU new regulations for financial sector and pension funds system reforms

The Baltic countries are EU accession countries and will become EU members on May 1, 2004. In the future their economic, financial and pension funds system development will be shaped by EU legislation and EU integration process.

#### 24.1. Single European Financial Market Establishment

The integration process of the Baltic States with EU can be divided into two stages:

- First, the approximation of the Estonian, Latvian and Lithuanian legal and institutional frameworks with EU acquis communautaire.
- Second, the political need for EU to implement the Financial Services Action Plan (FSAP) effectively by 2005 and the Risk Capital Action Plan (RCAP) by 2003 in order to create Single European Financial Market.

The Commission launched the FSAP in May 1999. At the Lisbon summit in March 2000, heads of State and Government set the target date of 2005 for the FSAP to be completed. The target period for the securities and risk capital markets is the end of 2003.

Latest research conducted for the Commission predicted that the integration of EU financial markets would bring

significant benefits to businesses, investors and consumers. The research predicts that EU-wide real GDP will increase by 1.1 per cent - or EUR 130 billion in 2002 prices over a decade or so. Total employment will increase by 0.5 per cent. Businesses will be able to get cheaper finance: integration of EU equity markets will reduce the cost of equity capital by 0.5 per cent and a 0.4 per cent decrease in the cost of corporate bond finance is expected to follow. Investors will benefit from higher risk-adjusted returns on savings.

EU accession performs a function of catalyst for further progress on the structural front as Baltic countries deepen their trade and financial integration with the Union, are progressively included in its economic policy co-ordination procedures, approximate legal and institutional acquis strengthen communautaire, and the capacity implementation. This legal and institutional convergence is likely to induce further real convergence by providing a clear road map for structural reform. Continued structural reforms will tend to increase total factor productivity, which has been a dominant driving force behind growth already so far. A recent Commission study on the economic impact on enlargement illustrates that in an optimistic reform scenario, which profits from the full benefits of EU membership average annual real GDP growth in the transition candidate countries could reach 4.8 per cent over the period from 2000 to 2009.

At the mid-2004, the Baltic countries will be part of EU single market. The adoption of the new regulations for the financial sector in EU will have impact on the structure and development of the Baltic financial markets.

The Barcelona European Council called for the ECOFIN Council and the European Parliament to approve in 2002 eight priority FSAP measures. At the end 2002, there was reached a common position or adopted the following documents in all the fields:

- Regulation on International Accounting Standards (Adopted on 19 July 2002);
- Collateral Directive (Adopted on 6 June 2002);
- Distance Marketing Directive (Adopted on 23 September 2002);
- Insurance Intermediaries Directive (Adopted on 30 September 2002);
- Financial Conglomerates Directive (Adopted on 20 November 2002);
- Market Abuse Directive (Adopted on 3 December 2002);
- Pension Funds Directive (Common Position reached on 5 November 2002);
- Prospectus Directive (Political Agreement reached on 5 November 2002).

The legislators and governments in the Baltic states must take into consideration FSAP measures and design new laws and regulations.

### 24.2. EU new proposals for the pension funds regulations

All the present pension fund legislation is based on two main concepts: strict state regulation of pension fund assets and prudential person rules. The main differences of the aforesaid concepts may be explained as a different perception of risk assets (shares) amount and foreign/national currency ratio in the pension fund portfolio. The legislation based on prudential person rules provides for a larger ratio of maximum investment into shares and foreign securities markets in the general investment portfolio as well as grants larger freedom of actions and responsibilities for pension funds managers.

EU Commission report (Recommendations for a European Code of Best Practice for Second Pillar Pension Funds, 1999) states 1984 - 1998 the average real the period of profitability of pension funds, which had to comply with strict quantitative requirements, comprised 6 per cent, whereas the respective profitability of pension funds which were administered under prudential person rules was 10 per cent. A lower profitability means lower payments or higher contributions. In other words, strict state regulation has an impact on the profitability of pension funds. For example, if an employed person during 40 years pays contributions, then by paying a contribution of 5 per cent of the salary and provided the real profitability of a pension fund is 6 per cent, he may expect to increase his pension. If the real profitability of pension funds makes up only 2 per cent, then its contribution rate shall be increased up to 20 per cent in order to ensure the same amount of pension. As we see, the contribution rate, pension fund profitability and state regulation are closely inter-related.

For a long time the EU legislators took strict pension funds assets regulation by the state as a ground, i.e. they strictly limited the maximum pension funds investments into shares and foreign markets. Unlike insurance, no EU legal framework exists yet for pension funds. A proposal for a Directive is under preparation so that pension funds also benefit from the Internal Market principles of free movement of capital and free provision of services.

In mid-October 2000, the European Commission submitted a draft Pension Funds Directive. The Directive will establish rigorous prudential standards ensuring that pension fund members and beneficiaries are properly protected. At the same time, pension funds will be allowed to invest up to 70 per cent of the overall investment portfolio into shares and up to 30 per cent into foreign currency. The new directive is expected to be enforced on January 1, 2004. Recently, Austria

and Germany have decided to increase the ceiling of pension funds investments into shares from 35 to 70 per cent 70 of the total investment portfolio.

By operating freely in capital markets, pension funds can optimise their investment policy and help accelerate EU capital market integration. Employers (decrease in pension contributions) or employees (increase in pension benefits) will benefit from increases in pension fund investment returns. This can be achieved without compromising pension security. In the context of the ageing population, it may help Baltic States to preserve the long-term financial sustainability of existing pension systems and provide risk capital to promote jobs and growth.

The regulations of the pension funds in the Baltic's are not in line with new EU proposals on this matter and a time needed to converge with new trends in pension funds regulations will depend on the economic situation in each country.

### 25. Pension reform influence upon financial and real sectors

Economic growth in the Baltic countries and catching-up EU process depends on a continued high investment and rapid technological change and may be associated with sizeable domestic savings-investment gaps in these countries. Growth accounting exercises seem to suggest that increases in total factor productivity are the main explanatory variable behind candidate countries post-transition growth performance. Given the still considerable scope for structural reforms, this situation is likely to continue. Nevertheless, gross fixed capital formation plays a major role, too.

Two major trends in the Baltic's economies will have major influence on the structure of pension funds investment strategies shaped by government regulations:

- The size of savings-investment gap; and
- The size of current account deficits.

The Baltic countries foresee an increase in their investment-to-GDP ratios in the period 2002-2005.

## 25.1. The savings-investment gaps in Baltic countries

In spite of accelerated growth, domestic savings may not keep pace with these investment needs. The establishment of the pension fund system may increase domestic savings and provide additional investment resource to avoid that prospectively negative private savings-investment balances induce unsustainable economy-wide savings-investment gaps. Such an economic prospect and the current economic situation will impact on the shape of pension funds investments regulations: the deeper savings-investment gap will push

government to introduce higher restrictions on investments in foreign markets and to keep money at home.

Future growth will depend on continued high investment-to-GDP ratios. This ratio has varied from 20.3 per cent of GDP in Lithuania to 27.3 per cent of GDP in Latvia at the end 2001. Investments levels were hit by Russian financial crises in 1998 and remain lower in Estonia and Lithuania as before precrises level (Table 84).

Table 84 Investment and savings in the Baltic's (1998 - 2001)

| 1998          | 1999           | 2000           | 2001        |         |
|---------------|----------------|----------------|-------------|---------|
| Estonia       |                |                |             |         |
| - Inve        | stment in real | sector (in % o | f GDP)      | 29.6    |
| 24.9          | 25.4           | 26.1           |             |         |
| - Depo        | sits (i        | in %           | of          | GDP)*   |
| 26.3          | 30.0           | 34.5           | 38.8        | 3       |
| Latvia        |                |                |             |         |
| - Inve        | stment in real | sector (in % o | f GDP)      | 27.3    |
| 25.2          | 26.5           | 27.3           |             |         |
| - Depo        | sits (:        | in 8           | of          | GDP)    |
| 16.2          | 15.9           | 19.5           | 22.2        | 2       |
| Lithuania     | . •            | I              |             |         |
| LI CIIUAIII a |                | nt in real se  | actor (in % | of GDP) |
| 24.3          |                | 18.5           | 19.4        | OI GDF) |
|               | 22.1           |                |             | GDP)    |
| 12.8          | 14.6           | 17.2           | 20.3        | J /     |

<sup>\*</sup>Domestic non-bank clients' deposits

Source: N° 11 - November 2002 Update of the Report on Macroeconomic and Financial Sector Stability Developments in Candidate Countries by Directorate General for Economic and Financial Affairs

**Estonia** has a good savings-investment balance. In addition to banks deposits, in Estonia a better than in other Baltic countries institutional investors' structure will provide

additional resources for investment financing. Pension funds are small, but they will grow in the medium term. This situation can make the Estonian government more liberal towards pension funds regulations.

In Latvia, domestic savings do not fully cover increasing investments. Domestic bank deposits have increased rapidly since the beginning of 2000, and the savings rate, which fell sharply in 1999, is likely to have returned to about the same level as before. However, investments are also increasing rapidly, and the share of enterprise loans that is covered by household deposits has declined. Investments may be expected to continue favourable development in the medium term, and the financing will have to continue to rely on foreign capital to some degree.

Only over the medium term, domestic savings will benefit from the introduction of a second pillar in the pension system. However, domestic demand for securities is still very limited, as institutional investors play a marginal role in finances. Latvian Premium income οf Latvian insurance companies amounted in 2001 to 2.0 per cent of GDP, life insurance alone to only 0.1 per cent. In the course of 2002, premium income for life insurance rose by a modest 2 per cent, but premiums for life insurance contracting in 2001. Total investments of insurance companies reached only 1.8 per cent of GDP in 2001. Pension funds are small, but they might benefit from the pension reform.

In Lithuania the improvement of the domestic savingsinvestment balance is partly due to a decrease in investments. The share of gross fixed capital formation to GDP decreased from 24.3 per cent in 1998 to a relatively low 18.8 per cent in 2000, but raised in 2001 somewhat to 19.4 per cent of GDP. Although the improvement of the savings-investment balance is positive, the fall in the investment ratio is worrying in the light of the Lithuania's long-term adjustment and growth capacities. The rate of capacity utilisation rose sharply in 2000 and the first half of 2001, and unless the investment share increases, it will be difficult to materialise the expected growth. However, an increase of the investment share will probably result in a worsening of the savings-investment balance. In the medium term, in order to keep the investmentsavings balance at sustainable levels and to grow to levels supportive to higher growth, investment to domestic savings will have to grow faster. The increasing in volume of premium in the insurance sector will provide additional financial resources for the sustainable growth. A sound, efficient and credible domestic financial sector is a precondition for achieving this goal. The savings-investment gap has narrowed and can be sustained at a higher level then now.

The establishment of the pension fund systems can increase domestic savings and provide additional investment resource.

# 25.2. The current accounts deficit and the need for new domestic financial resources

The savings-investment gap is closely related to current accounts deficit: the reduction in the domestic savings must be compensated by foreign inflows. The Baltic countries persistently have large current accounts deficits: at the end 2001, the current accounts deficit was lowest in Lithuania and comprised 4.8 per cent of GDP; Estonia has current accounts deficit 6.8 per cent of GDP and Latvia reached 10.1 per cent of GDP and this ratio was highest among Baltic countries.

A major macroeconomic policy challenge consists of keeping prospectively high current account deficits within the range where sound external financing can be secured. Over the years, the current account imbalances have been, at times of Russia in 1998, rather large and offsetting measures, with detrimental effects on growth, had been taken. In the short term, the Baltic countries will still be able to rely, to a considerable extent, on privatisation-related FDI inflows as a means to finance their current account deficits. period from 1997 to 2001, average annual FDI inflows in Baltic countries ranged from 8.2 per cent in Estonia and 4.5 per cent of GDP in Lithuania to 3.4 per cent of GDP in Latvia. However, as the privatisation process is coming to the end in Estonia and Lithuania, current account deficit financing may have to increasingly rely on debt-creating, more short-term, and easier to reverse capital inflows. One major policy challenge is, therefore, to further improve the business environment in order to attract non-privatisation related FDI. The pension funds money can help replace in the long-run part of FDI.

To the extent that there is a lack of domestic bank and non-bank intermediation of domestic and foreign funds, direct foreign financing of companies plays a major role in some Baltic countries. This may substantially increase the foreign debt burden of companies and potential external vulnerabilities of the countries in question. In a short-run this situation can strengthen governments' conviction to keep pension funds at home.

The complete liberalisation of capital markets could exacerbate potential vulnerabilities if capital inflows should be poorly intermediated by the domestic financial sector and/or exceed the absorption capacity of the economy. Experience shows that some of these capital inflows will be more short-term and more reversible and, hence, very sensitive to macroeconomic and structural policy stances. The capital liberalisation process will be completed upon accession, given that the Baltic countries as accession countries have not requested any transition periods in relevant areas.

From the government point of view, the pension funds money can be thought as "stabilisation funds".

Estonia maintains no restrictions on payments and transfers in respect of current or capital account transactions. Crossborder capital movements, and the provision of services, have been liberalised, although few restrictions are in place regarding the provision of insurance services which will have to be abolished in order to comply with the acquis communautaire.

In Latvia capital movements are highly liberalised, and the removal of the last restrictions is not likely to influence capital net flows considerably. Pension funds are not allowed to invest more than 15 per cent abroad. For insurance companies this ceiling amounts to 10 per cent. However, on an aggregate level this restriction seems presently not binding as insurance companies invest over 90 per cent in Latvian assets. This, however, might change with the further growth of that sector and the corresponding rise of investment needs of that sector.

In Lithuania, financial markets and capital movements are highly liberalised, and the removal of the last remaining restrictions should not have any influence on capital flows. Still residents are not allowed to open a bank account abroad without permission from the central bank. Pension funds are not allowed to invest more than 30 per cent of their assets in foreign securities. However, the lack of pension funds means that the abolishment of this restriction will have no practical consequences.

In the medium term there are more pro then contra arguments for governments to keep pension funds money at home as "stabilisation funds" and to put restriction on the investments in foreign markets.

# 25.3. Pension reform influence on the financial and industry sectors

The establishment of pension fund system will gradually change the structure of Baltic States financial markets and will influence companies management.

Capital market development forecasts. Due to a high foreign capital concentration level in real sector and low demand for new shares emission the capital markets of the Baltic states will expand

owing to fixed income securities:

 Pension funds will promote securities with fixed income market development: new types of company, municipality and Government bonds will be introduced.

- Pensions funds will lengthen term structure of the bond market (for examples, the longest term of the government bonds in Lithuania is 10 years, in Latvia is 5 years and in Estonia are T-bills).
- If pension funds are allowed to invest a share of their assets into IPO, then their investment will raise the Baltic capital markets liquidity.
- Importance of listing process and stock exchanges will increase.

Commercial banks sector development forecasts. Pension funds (in Estonia and Latvia) and life-insurance companies (in Lithuania) may influence commercial banks in two markets, i.e. markets of savings and loans. The forecasted impact of pension funds savings on the market will be as follows:

- Mandatory accumulated pension funds and life insurance companies will increase the amount of deposits in commercial banks, as the first ones shall have to keep a share of liquid assets in the form of bank deposits. In other words, the compulsory saving will not cut down the number of deposits, as the current contributions will be redistributed from Pillar I into Pillar II;
- Pillar III or voluntary pension accumulation will reduce the amount of bank deposits, as the accumulated or future savings will be distributed among the banks and voluntary insurance pension funds and life-insurance companies;
- Competition in the savings market may stimulate banks to create new savings instruments for persons, for example, the deposit certificates (CDs).

Forecasted pension funds impact on loans market will be as follows:

- Pension funds will become competitors for commercial banks in large enterprise financing market;
- Competition among enterprises in bond market and commercial banks loans market may reduce the interest rate. As a result, due to decreased income from interests the bank profitability may decline;
- Due to increased competition of pension funds and life insurance companies the quality of commercial banks loans portfolio may deteriorate.

**Pension reform impact on company's management.** The leverage of Baltic pension funds on company management is regulated by investment diversification requirements. The requirements on

Baltic pension funds assets structure clearly show that one pension fund will not be able to have an

impact on company management. However, several pension funds having purchased an amount of shares within the legal boundaries together may have influence on company management. In particular:

- Pension funds investments will be concentrated in companies, which have achieved the best operation results;
- Management of best companies may be taken-over by pension funds, in the result of which the financial discipline and control of these enterprises may be enhanced;
- Pension funds will not fund small and middle size enterprises;

In the medium term perspective the pension funds investments can be easily absorbed by the Baltic fixed income securities market and later by IPO's market, because of the small investments volume.

#### Conclusions

The success of pension funds functioning depends on a financial system health at the time of the new system establishment. All Baltic countries have made great strides in reforming their financial sectors. Nevertheless, further development and expansion is clearly necessary. As illustrated by experience in other countries, the establishment of the pension funds is not without instability risks.

In addition, the costs of potential crises would be higher in future than they were in the past, since financial sectors have been already expanding in size. Macroeconomic stability is certainly a major precondition for successful pension system reforms and stable financial sector development. Due to transition cost to the mandatory pension funds system, macroeconomic instabilities and excessive fluctuations of macroeconomic variables can put severe stress on banks and the rest of the financial sector. The establishment of the pension funds system in Estonia, Latvia and Lithuania are heavy conditioned by what happened in the past. This explains why the pace of development of pension funds in the region countries is different.

Baltic countries financial systems are predominantly bank-based, whereas domestic equity and bond markets remain very small. Foreign capital penetration ratio in banking sector measured as major foreign ownership in total assets is the highest in Estonia (98 percent) followed by Lithuania (86 percent). Financial conglomerates of Swedish and Finnish origin hold majority of the banks' share capital in Baltic

States. In the Euro area countries, in contrast, foreign ownership is highly limited. Only about 20 per cent of the banks' capitals in Euro area countries are in foreign ownership, and only in four countries this ratio comprises at least 30 per cent.

Foreign banks lead to higher concentration in banking sector in Estonia where the three largest banks have 91 percent and in Lithuania - 79 percent of total assets of the whole banking sector. The consolidation within the Latvian banking system is still going on and now assets of the three largest banks account for 52 percent of total assets of the whole banking sector.

The Baltic States region remains under-banked in terms of banking assets and deposits. In Latvia and in Estonia, the relation of banking assets to the economies' GDP amounts to about 77 percent and 70 percent. Lithuania is at the other end of the spectrum with its banking assets of only around 32 percent of GDP, whereas, in the Euro area, bank assets amount to about 265 per cent of GDP.

At the end of 2001, average stock market capitalisation of Baltic countries reached only around 19 per cent of GDP, ranging from 28 per cent in Estonia to less than 10 per cent in Latvia. This compares to an average capitalisation of nearly 87 per cent in the EU or still 72 per cent in the Euro area. Bond markets are dominated by Government paper. Marketable government debt as a percentage of GDP amounts on average to roughly one forth of the Euro area level. The development of viable securities markets is often constrained both by the supply and the demand side.

As regards the latter, the assets of institutional investors in relation to GDP are close to 1 per cent and remain minor in the Baltic countries. In the region insurance companies are second biggest institutional investors following banks. Their total investments portfolio comprises more then EUR 550 million including about EUR 150 million of life insurance investments portfolio. The insurance sector as a banking sector is highly concentrated, because of the bancassurance system development in Estonia and Lithuania.

Currently, the third institutional investors structure building by the partly privatisation of the state pension The pension system reform began with implementation of the voluntary third pillar in 1999, and of the quasi-compulsory second pillar, more recently, in 2002. In Estonia and Latvia, there were established three pillar pension systems. Lithuania introduced a two pillar pension system without mandatory pension savings. The pension funds systems in the Baltic's are in the early stage of development. The mandatory pension funds collected about EUR 20 million of contributions. In the medium-term perspective the pension funds investments can be easily absorbed by the Baltic fixed income securities market and later by IPO's market, because of the small investments volume. In the long-term perspective the

pension funds will help close savings-investment gap and to promote economic growth.

In the future, the Baltic's financial and pension funds system development will be shaped by EU legislation and EU integration process.

### References

Berg, A., Borensztein, E., Sahay, R. and Zettelmeyer, J. 1999. The evolution of output in transition economies: explaining the differences. IMF Working Paper 99/73.

Blake, David and J. Michael Orszag (1998). "The Impact of Pension Funds on Capital Markets", mimeo Januarty 1998.

Blake, D., Lehman B., and Timmermann A. Asset Allocation Dynamics and Pension Fund Performance//Journal of Business, 72, 1999. - P. 429-61.

Blommestein, Hans J. (1997). "Institutional Investors, Pension Reform and Emerging Securities Markets. Inter-American Development Bank, Office of the Chiel Economist, Working Paper 359.

Blommestein, Hans (1998). "Impact of Institutional Investors on Financial Markets", in Blommenstein et al (eds.), OECD, pp.29-106.

Blommestein, Hans J. and N. Funke (1998) (Editors) Institutional Investors in the New Financial Landscape. OECD.

Bokans, Janis. Report: Life insurance market development in Baltic Countries, 2000.

Bodie, Zvi (1989). "Pension Funds and Financial Innovation". NBER Working Paper 3101, September.

Bebchuk, Lucian (1999). "Separation of Ownership and Control". Working paper Harvard Law School.

Campos, Nauro F. and Coricelli, Fabrizio. Growth in Transition: What We Know, What We Don't, and What We Should William Davidson Working Paper Number 470, February 2002.

Central Statistical Bureau of Latvia <a href="http://www.csb.lv/">http://www.csb.lv/</a>

Chenery, Hollis, 1960. "Patterns of Industrial Growth," Amer. Econ. Rev. 50: 4, pp. 624-654.

Classens, Stijn, Klingebil, Daniela, and Schmukler, Sergio L. The Future of Stock Exchanges in Emerging Economies: Evolution and Prospects. The Working Papers Series, February 2002. The Wharton Financial Institutions Center.

Department of Statistics to the Government of the Republic of Lithuania

http://www.std.lt/

Insurance regulation and supervision in OECD countries, Asian economies and CEEC and NIS countries, OECD study.

Insurance Yearbook 2000, 1999, 1998, 1997, 1996. Estonian Insurance Supervisory Authority.

Insurance in Lithuania 2001, 2000, 1999, 1998, 1997, 1996. Lithuania State Insurance Supervisory Authority under the Ministry of Finance.

Insurance Yearbook 2000, 1999, 1998, 1997, 1996. Latvia Insurance Supervision Inspectorate.

Impavido, Gregorio/ Musalem, Alberto R./Vittas, Dimitri (2 April 2002). Contractual Savings in Countries with a Small Financial Sector. The World Bank.

ECB. Financial Sectors in EU Accession Countries. Editor: Christian Thimann, 2002.

Eesti Pank (Bank of Estonia), Annual Report, various issue, http://www.ee/epbe/.

Eesti Pank (Bank of Estonia), Bulletin, various issues, http://www.ee/epbe/.

Eesti Pank (Bank of Estonia), Newsletters, various issues, http://www.ee/epbe/.

Eesti Pank (Bank of Estonia), Quaterly Review, various issues.

EU. N° 11 - November 2002 Update of the Report on Macroeconomic and Financial Sector Stability Developments in Candidate Countries by Directorate General for Economic and Financial Affairs

European Bank for Reconstruction and Development, 2001 Transition Reports (London: EBRD).

Falcetti, Elisabetta, Raiser, Martin, and Sanf, Peter. Defying the odds: initial conditions,

reforms and growth in the first decade of transition. ERBD, Working paper No. 55, July 2000.

Financial and Capital Market Commission (Latvia) http://www.vaui.gov.lv/en/

Holzmann, Robert, (1994), "Funded and Private Pensions for Eastern European Countries in Transition?", in: Revista de Análisis Económico, 9 (1), 183-210.

Holzmann, Robert (1999a), "The World Banks Approach to Pension Reform", September 1999, Worldbank web-site.

Ho, Corrinne. A survey of the institutional and operational aspects of modern-day currency boards. BIS Working Papers No 110, March 2002.

Keller, Peter M. et al (2000). The Baltic: Exchange Rate Regimes and External Sustainability. Draft, IMF.

Koivu, Tuuli. Banking and Finance in the Baltic Countries. Bank of Finland/Institute for Economies in Transition, BOFIT online 11/2002.

Latvijas Banka (Bank of Latvia) http://www.bank.lv/eng/

Lee, Ruben. The Future of Securities Exchange. The Working Papers Series, February 2002. The Wharton Financial Institutions Center.

Lietuvos bankas (Bank of Lithuania) http://www.lbank.lt/home/default.asp

Lindeman, D., Rutkowski, M. and Sluchynskyy (2000), The Evolution of Pension Systems in Eastern Europe and Central Asia, The World Bank.

National Stock Exchange of Lithuania http://www.nse.lt/

Mickiewicz, Tomasz and Zalewska, Anna. Deindustrialisation. Lessons from the Structural Outcomes of Post-Communist Transition. William Davidson Institute Working Paper Number 463, January 2002.

Mc Morrow, K., Roeger, W (2002), "EU pension reform - An overview of the debate and an empirical assessment of the main policy reform options", EC DG ECFIN Economic Papers No 162.

Müller, Katarina (2000a), "From the State to the Market? Pension Reform Paths in CEE and in the Former Soviet Union", Monthly Report 6/2000, The Vienna Institute for International Studies (WIIW).

Müller, Katharina, (2000b), "Ten Years After: Pension Reforms in Central and Eastern Europe & the Former Soviet Union", in: WIIW Monthly Report 2000/1, 20-29.

Orszag, Peter R. and Stiglitz. Joseph E., "Rethinking Pension Reform: Ten Myths About Social Security Systems", Conference on New ideas about old age security, September 1999, World Bank web-site.

OECD, 1991, Taxing profit in a global economy, Committee on Fiscal Affairs Report.

OECD, 2000, Tax burdens: alternative measures, Paris.

OKSANEN, H. (2001), "A case for partial funding of pensions with an application to the EU candidate countries", EC DG ECFIN Economic Papers No 149.

Pye, Robert B.K. The Evolution of the Insurance Sector in Central and Eastern Europe and the former Soviet Union. William Davidson Institute Working Paper Number 336, August 2000.

Riga Stock Exchange
http://www.rfb.lv/

Schiff, Jerald/ Hobdari, Niko/ Schimmelpfennig, Axel/ Zytek, Roman, (2000), "Pension Reform in the Baltics. Issues and Prospects". IMF Occasional Paper No. 200. Washington, DC: IMF.

Samwick, A. Is Pension Reform Conductive to Higher Saving? World Bank Research Paper,

www.worldbank.org/research/projects/savings/pdffiles/samwick2.
pdf.

Scimmelpfennig, A. (2000) Pension Reform, Private Saving, and the Current Account

in a Small Open Economy. Working Paper 00/171, International Monetary Fund, October.

State Insurance Supervisory Authority under the Ministry of Finance of the

Republic of Lithuania

http://www.finmin.lt/engl/draudien.htm

Rowthorn, Robert E. and Wells John R., De-Industrialization and Foreign Trade,

Cambridge: Cambridge University Press, 1987.

Statistical office of Estonia
http://www.stat.ee/

Sutela, Pekka. Managing capital flows in Estonia and Latvia. International Center for Economic Growth European Center, Working Papers Nr.8, 2002.

Tallinn Stock Exchange
http://www.tse.ee/

Tang, Helena/ Zoli, Edda/ Klytchnikova, Irina, "Banking Crises in Transition Countries: Fiscal Costs and Related Issues".

The Baltics: Medium-Term Fiscal Issues Related to EU and NATO Accession. IMF Country Report No. 02/7, January 2002.

The World Bank "Averting the Old Age Crisis, Policies to Protect the Old and Promote Growth", 1994.